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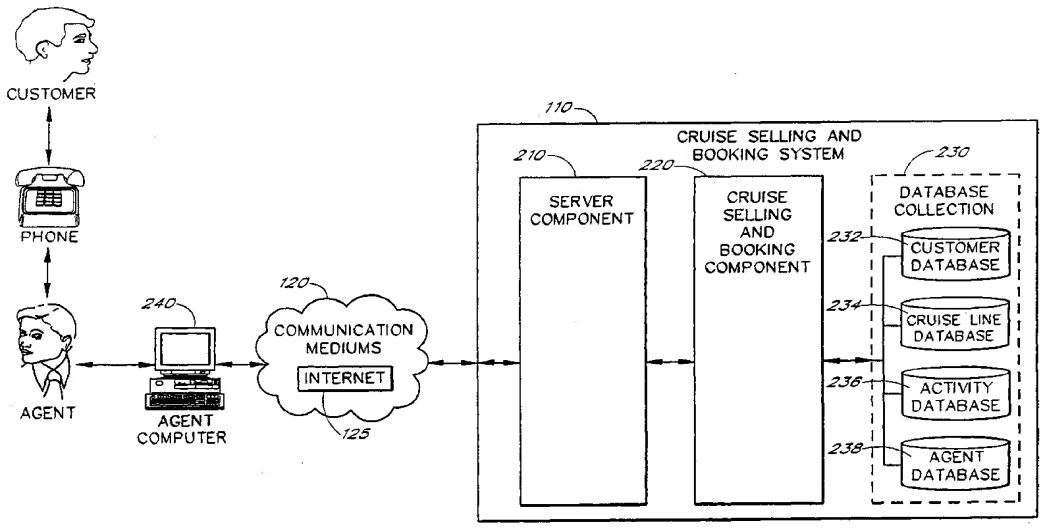
(71) Applicant: **TRAVEL SERVICES INTERNATIONAL, INC.** [US/US]; 220 Congress Park Drive, Delray Beach, FL 33445 (US).

(72) Inventors: **SCHIFF, Martin, R.**; 8935 Ramblewood Dr., #2411, Coral Springs, FL 33071 (US). **SUSSMAN-WILES, Kathleen, M.**; 19370 Collins Ave., 1010C, Miami Beach, FL 33160 (US). **EWART, Vivian, D.**; 910 Amherst Ave., Davie, FL 33325 (US). **HUFF, Wallace, C.**; 2188 100 Ave., Dresser, WI 54009 (US). **BERK, Byron, J.**; 25 Webster Ave., #406, Somerville, MA 02143 (US). **ELENBERGER, Maureen, J.**; 299 Simon Willard Rd., Concord, MA 01742 (US). **FESSENDEN, Timothy**; 63 Maple St., Apt. 2, Waltham, MA 02154 (US). **FITTON, Paul**; 11 Hills Farm Lane, Hollis, NH 03049 (US). **LOISELLE, Vance, M.**; 68 Nourse Rd., Bolton, MA 01740 (US). **CARPENTER, Michael, A.**; 15590 75th Lane N., Loxahatchee, FL 33470 (US). **SHEROTA, Michael, T.**; 1651 S.W. 105th Lane, Davie, FL 33324 (US). **JUDY, Elizabeth, K.**; 4315 Roma Court, Marina del Rey, CA 90292 (US). **RODRIQUEZ, Elena, M.**; 7125 S.W. 158 Path, Miami, FL 33193 (US). **CHRISTEN, Holley, S.**; 318 Highridge Drive, Syracuse, NY 13215 (US). **COX, Mitch**; 529 Ramona Lane, Orlando, FL 32805 (US). **ELLIOTT, Todd**; 13610 Domoch Dr., Orlando, FL 32828 (US). **HELMS, Kevin**; 1217 Climbing Rose Dr., Orlando, FL 32118 (US). **QUINTANA, Adolf**; 8611 Villa Point #1221, Orlando, FL 32810 (US). **TOLLE, Dot**; 808 Sleepy Court, Casselberry, FL 32707 (US). **PORTER, Nancy**; 200 Delaware Ave., St. Cloud, FL 34769 (US). **REYNOLDS, Karen, J.**; 4844 East Michigan Street, Apt. 14, Orlando, FL 32812 (US). **SCANION, Monica**; 401 E. 76th Street, New York, NY 10011 (US). **COLANGELO, Paul**; 220 Congress Park Drive, Delray Beach, FL 33445 (US). **CODD, Tracey, Lee**; 18354 Inwood Avenue, Pt. Charlotte, FL 33948 (US). **DELAND, Joanell, U.**; 7013 Lehman Street, Clay, NY 13041 (US). **MOORHEAD, Timothy, M.**; 4968 Razorback Run, Syracuse, NY 13215 (US). **BURKHARD, Anne, D.**; 2906 Sabalwood Ct., Delray Beach, FL 33445 (US). **DELPINO, George**;

[Continued on next page]

(54) Title: SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES, MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS, DISPLAYING CRUISE LINE PRICING DATA, COMPARING PRODUCT INFORMATION AND MAINTAINING CLIENT RELATIONSHIPS



(57) Abstract: In one embodiment, systems and methods for on-line selling and booking of cruises enable a plurality of customers, agents, and cruise lines to interact with a cruise selling and booking system via communication mediums. An interactive tool is provided for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. Customers and/or agents may search for and compare various cruise packages to find a cruise that best suits the customer needs and desires.

WO 01/40978 A2

11146 N.W. 18 Ct., Coral Springs, FL 33071 (US). **DELVA, Joelle, S.**; 2200 N.W. 181 St., Miami, FL 33056 (US). **EVERHART-BROOKS, Sharon**; 18262 103rd Trail South, Boca Raton, FL 33498 (US). **FERGUSON, Bradley**; 19077 Skyridge Circle, Boca Raton, FL 33498 (US). **FORMAN, David, A.**; 610 Anderson circle, #107, Deerfield Beach, FL 33441 (US). **HINTZ, Samuel, L.**; 898 N.W. 84th Drive, Coral Springs, FL 33071 (US). **KLOTZ, Irwin, D.**; 7181 N.W. Turtle Walk, Boca Raton, FL 33487 (US). **KURK, Courtney, W.T.**; 1405 Meridian Ave. #405, Miami Beach, FL 33139 (US). **LESLIE, Keith, J.**; 1460 S.W. 72nd Ave., Plantation, FL 33317 (US). **LEVY, Sandi, B.**; 4668 S.W. 12th Place, Deerfiled Beach, FL 33442 (US). **LOCICERO, Fred**; 58 Carnegie Drive, Smithtown, NY 11787 (US). **LUNA, Charlotte, A.**; 9571 Lake Serena Dr., Boca Raton, FL 33496 (US). **NICKERSON, Jeffrey, A.**; 3663 Cocoplum Circle, Coconut Creek, FL 33063 (US).

(74) Agent: DELANEY, Karoline, A.; Knobbe, Martens, Olson And Bear, Llp, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).

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SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES, MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS, DISPLAYING CRUISE LINE PRICING DATA, COMPARING PRODUCT INFORMATION AND MAINTAINING CLIENT RELATIONSHIPS

FIELDS OF THE INVENTION

SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES

The present systems and methods relate to on-line booking of cruises and in particular concern applications designed to facilitate cruise price comparisons, reservations, booking, and customer management by travel agents as well as individual customers.

SYSTEMS AND METHODS OF MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS

The present systems and methods relate to on-line booking of cruises and in particular concern applications designed to facilitate cruise booking and streamline the cruise selection process among a variety of available cruise packages.

SYSTEMS AND METHODS OF DISPLAYING CRUISE LINE PRICING DATA

The present systems and methods relate generally to the field of on-line price comparisons and in particular concern applications designed to facilitate cruise price comparisons, reservations, booking, and customer management by travel agents as well as individual customers.

SYSTEMS AND METHODS OF COMPARING PRODUCT INFORMATION

The present systems and methods relate generally to the field of on-line product comparisons and in particular concern applications designed to facilitate cruise price comparisons, reservations, booking, and customer management by travel agents as well as individual customers.

SYSTEMS AND METHODS OF MAINTAINING CLIENT RELATIONSHIPS

The present systems and methods relate to on-line booking of cruises and in particular concern applications designed to facilitate cruise price comparisons, reservations, booking, and customer management by travel agents.

BACKGROUND OF INVENTION

SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES

The growth of the cruise industry has created an increase in the number of passenger cruise lines that sail each year. Each cruise line offers a variety of sailings that vary depending on destination, travel date, cruise ship, cabin category, cabin room, and so forth. While such variety is appealing to potential customers, finding the cruise package that best fits the customer's preferences and budget is often difficult.

One of the most daunting tasks for a travel agent is keeping track of all of the available cruise sailings. The large amount of information pertaining to each sailing combined with constantly changing information such as pricing and availability makes managing the cruise sailing data very difficult. In addition, each cruise line tends to use its own format for categorizing, storing, and accessing cruise data. Commonly, travel agents choose to work with a select number of the major cruise lines and avoid offering travel packages from the smaller or less familiar cruise lines limiting the customer's choices. In many instances, customers must call several different travel agents to compile a complete set of cruise options which is time-consuming and frustrating for the customer and burdensome for the travel agents.

Another common problem is that travel agents do not offer generic cruise packages, but instead spend large amounts of time determining the preferences of each individual customer. A travel agent spends, on average, well over one hour with each customer to find cruises that match the customer's preferences taking into account, for example, past cruise bookings and individual preferences. To actually complete a cruise booking transaction, it takes an average of ten to fifteen phone calls wherein the travel agent is constantly contacting the customers and the cruise lines. This process can take several weeks, and on many occasions, the customer may decide not to book the cruise. Historically, travel agents have been unable to track and manage this customer information. For example, if a customer decides not to book a cruise, but calls back a week later, the travel agent has to rely on his notes to recall the customer's preferences, the cruise packages they discussed, the quotes given to the customer, and so forth.

Another limiting factor of conventional approaches is that separate computer systems are typically required to complete transactions between the travel agents, their customers, and the various cruise lines. For example, one system may provide an interface between the cruise line and the agent, another may allow the agent to process cruise payments, and another may collect standard contact information from the customer. In addition, many of the cruse lines require travel agents to purchase or lease a dedicated computer system that will allow the travel agents to directly tie into and communicate with the specific cruise line. Most of these "proprietary" computer systems use highly archaic programs that have a poorly designed interface. Acquisition of the cumbersome systems is a costly endeavor for small scale travel agencies that may not have enough business to support many of the major cruise lines' systems. Also, these systems are limited in expandability, are difficult to keep updated, and may become legacy systems (outdated) the day that they are installed. A further problem with such systems is that they typically incorporate information from a single or a limited number of cruise lines. This results in the travel agent having to purchase or lease different computer systems and software packages to have access to multiple sets of cruise line information increasing the travel agent's costs which typically must be passed onto the customer.

Another difficulty with conventional approaches is that they fail to factor in customer flexibility. For some customers, the price may be negotiable; for others, the dates of travel may be adjusted. Such flexibility is often ignored and only those cruises that meet a rigid set of criteria are typically presented to the customer. For example, a customer may prefer a cruise to Alaska departing on specific date. The customer may, however, be interested in other cruises to Alaska that depart before or after the specific date. Moreover, the customer may also want to know about the "special discount" cruise to Hawaii departing during the same time and for the same price. Finding cruise packages that only fall within a rigid set of criteria leave many cruise packages ignored, even though the cruise packages may be of interest to the customer.

Another common problem is that the large number of options makes it difficult to compare accurately various cruise packages. The customer may find prices for competing cruise packages, but unless the customer knows the exact details of each cruise package, it is difficult for the customer to figure out which cruise package is the "best deal." For example, suppose X offers a cruise to Panama for $3000 and Y offers a similar cruise to Panama for $2800. Y appears to be a better deal until the customer learns that X's price is for the Presidential Suite and Y's price is for a Fourth Class cabin. The many different categories of cruise cabin levels further exacerbate these problems. For example, a single cruise ship may have eight to ten different cabin categories. In addition, other options such as special

promotions may also affect the comparison. For example, X may offer a "special" senior citizen rate of $1700 for a cruise to Panama with lodging in a First Class cabin. Such a promotion may be of interest to customers that qualify for the special rate. Cabin category levels and special promotions are just two of many factors that are part of cruise packages. As more and more factors are considered, comparing cruise packages becomes increasingly more complex, thus making a comprehensive comparison of all available cruise choices to a particular destination a daunting task even for a seasoned travel agent.

Thus, travel agents are required to rely on expensive, outdated, and proprietary systems, telephone and facsimile communication, as well as separate customer management systems to sell and book cruises.

SYSTEMS AND METHODS OF MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS

The growth of the cruise industry has created an increase in the number of passenger cruise lines that sail each year. Each cruise line offers a variety of cruise packages, and the cruise packages vary depending on destination, sailing date, cruise ship, cabin category, excursions, special discounts, and so forth. While such variety offers great selection to potential customers, finding the cruise package that best fits the customer's budget and preferences is often a difficult task. As a result, travel agents spend large amounts of time and energy researching and booking cruises for customers.

Conventional approaches in the cruise industry fail to provide the travel agent with an integrated collection of tools capable of effectively managing the large number of available cruises. In many instances, there are more choices and options available than an agent has time to thoroughly describe. Additionally, the customer may become distracted by the quantity of information from all of the available cruises so as to make it difficult for the customer to select a cruise which best meets his needs. These problems create inefficiency in the cruise industry and affect both travel agents and customers alike.

Customers often seek the advice and guidance of travel agents to provide them with a variety of different cruises and available options, while at the same time, they rely on the travel agent to help limit the number of cruises that they must review. This reliance places a significant burden of responsibility upon the travel agent who is required to be knowledgeable about both the customer's preferences as well as the available cruises. The travel agent is then faced with the daunting task of matching a customer with a set of cruises that meet the customer's preferences. In addition, the agent must be ready to present these choices to the customer in a timely manner.

Conventional approaches to solving this problem in the cruise industry often lead to less than optimal results and do not provide the customer with a comprehensive set of available cruises. Because a travel agent is limited in the amount of time he can spend with each customer, a travel agent may only provide the customer with cruise choices with which the travel agent is most familiar. This limitation is a disservice to the customer as alternative choices may be available of which the travel agent is unaware or does not have time to find.

An additional problem is that travel agents spend large amounts of time determining the preferences of each individual customer, finding cruise packages that meets the customer's needs, and booking the cruise package. A travel agent spends, on average, well over one hour with each customer manually sifting through piles of paper documentation and is constantly on the phone with cruise lines to get current information, such as availability and pricing.

Another common problem relates to the varied pricing and cabin availability of cruise sailings. For each cruise sailing, there are typically a wide variety of pricings, luxury levels, features, and/or available activities. This complexity is further compounded by numerous special offers, discounts, group rates, and restrictions which may apply to the cruise sailing. As a result, a travel agent may encounter difficulty in obtaining the best price and/or quality cruise for the customer unless the agent devotes an undue amount of time to collecting customer information and researching every possible cruise package.

Thus, conventional approaches fail to provide effective methods for narrowing the choices of the many different cruises to provide the customer with a consolidated, yet comprehensive, series of cruises that are best suited for the customer. Furthermore, conventional approaches may not adequately consider customer preferences or eligibility when determining cruise availability. As a result, a travel agent's efficiency is hindered when dealing with multiple clients and may result in the non-optimal presentation of cruises to customers affecting both the quality of the cruise booking process experienced by the customers and the number of customers which are serviced by the travel agent.

SYSTEMS AND METHODS OF DISPLAYING CRUISE LINE PRICING DATA

The growth of the cruise industry has created an increase in the number of passenger cruise lines that sail each year. Each cruise line offers a variety of cruise packages, and the cruise packages vary depending on destination, sailing date, cruise ship, cabin category, excursions, special discounts, and so forth. While such variety offers great selection to potential customers, finding the cruise package that best fits the customer's budget and preferences is often a difficult task. As a result, travel agents spend large amounts of time and energy sorting through the myriad of cruise information to find cruises that are of interest to the customer.

One common problem is that conventional approaches make it difficult to analyze cruise package pricing information namely because there is a large amount of pricing data associated with each cruise package. For example, a cruise package's pricing data may be based on varying factors such as cabin type, cabin location, number of persons per cabin, group block discounts, and so forth. Sorting through such data is difficult and arduous.

Another common problem is that the cruise package pricing information is constantly changing. As occupancy levels change for each cruise ship, the price data may vary to reflect the changes. For example, a cruise ship with a low occupancy rate may reduce prices to try and encourage sales; whereas a cruise ship with a high occupancy rate may increase its prices to reflect the high demand. Additionally, a cruise ship set to sail in a short amount of time may release available cabins at reduced rates to attempt to fill the vacancies. This constant changing of price data makes it difficult to find accurate cruise package pricing information.

An additional problem is that travel agents spend large amounts of time determining the preferences of each individual customer, finding cruise packages that meets the customer's needs, and booking the cruise package. A travel agent spends, on average, well over one hour with each customer manually sifting through piles of paper documentation and is constantly on the phone with cruise lines to get current information, such as availability and pricing.

Thus, the large amount of data coupled with the constant changing of the prices makes it difficult and time consuming to retrieve, analyze, and compare various cruise packages.

SYSTEMS AND METHODS OF COMPARING PRODUCT INFORMATION

The growth of the cruise industry has created an increase in the number of passenger cruise lines that sail each year. Each cruise line offers a variety of cruise packages, and the cruise packages vary depending on destination, sailing date, cruise ship, cabin category, excursions, special discounts, and so forth. While such variety offers great selection to potential customers, finding the cruise package that best fits the customer's budget and preferences is a difficult task. As a result, travel agents often spend large amounts of time and energy sorting through a myriad of cruise information to find cruises that are of interest to the customer.

One common problem is that conventional approaches make it difficult to view cruise package and pricing information namely because there is a large amount of cruise data associated with each cruise package. For example, cruise data may include itinerary, cabin type, cabin location, number of persons per cabin, group block discounts, and so forth. Viewing this large amount of data can be quite difficult.

Another common problem is that the large amount of cruise package and pricing information makes it difficult to compare accurately various cruise packages. It is cumbersome to view information for a single cruise package and even more difficult to view information for multiple cruise packages. Regardless of the difficulty, the customer needs to know the details of each cruise package in order to determine which cruise package is the "best deal." For example, suppose X offers a cruise to Panama for $3000 and Y offers a similar cruise to Panama for $2800. Y appears to be a better deal until the customer learns that X's price is for the Presidential Suite and Y's price is for a Fourth Class cabin. Access to cruise package pricing information is critical.

An additional problem is that travel agents spend large amounts of time determining the preferences of each individual customer, finding cruise packages that meets the customer's needs, and booking the cruise package. A travel agent spends, on average, well over one hour with each customer manually sifting through piles of paper documentation and is constantly on the phone with cruise lines to get current information, such as availability and pricing.

SYSTEMS AND METHODS OF MAINTAINING CLIENT RELATIONSHIPS

The growth of the cruise industry has created an increase in the number of passenger cruise lines that sail each year. Each cruise line offers a variety of cruise packages, and the cruise packages vary depending on destination, sailing date, cruise ship, cabin category, excursions, special discounts, and so forth. While such variety offers great selection to potential customers, finding the cruise package that best fits the customer's budget and preferences is often a difficult task. As a result, travel agents spend large amounts of time and energy researching and booking cruises for customers.

Conventional approaches in the cruise industry fail to recognize the travel agent's efforts in the cruise booking process. Travel agents are actively involved in the cruise booking process beginning with the initial customer contact (e.g., by telephone conversations, personal appointments, e-mail solicitations, etc.), extending to determining what the customer wants and scouring the cruise line industry to find acceptable cruise packages. By the time the agent has booked a cruise package for the customer, the agent has spent a significant amount of time with the customer. Such service is laborious and typically compensated by sales commission. While there are a number of customer information systems which have been used by travel agents to provide and manage customer contact information, these systems fail to track the travel agents' close involvement with their customers throughout the cruise selling and booking

process. By relying on such systems, travel agencies and the agents working therein encounter customer management difficulties and inaccurate tracking of sales commission figures.

An additional problem with conventional approaches is that they fail to ensure that customers will be directed to agents with whom they have previously established a relationship. It is important that the customer receives the personal attention and recognition often available only from the travel agent with whom the customer has had previous contact, as the customer/agent relationship significantly impacts repeat business rate in the cruise industry.

An further problem with conventional approaches is that travel agents spend large amounts of time determining the preferences of each individual customer, finding cruise packages that meets the customer's needs, and booking the cruise package. A travel agent spends, on average, well over one hour with each customer manually sifting through piles of paper documentation and is constantly on the phone with cruise lines to get current information, such as availability and pricing.

Thus, conventional approaches fail to provide customer/agent tracking and management thereby reducing the number of potential customer cruise bookings. Furthermore, conventional approaches do not adequately protect the agent's customer pool leading to reduced commissions through inappropriate customer switching among agents.

SUMMARY OF THE INVENTION

SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES

One embodiment of the present invention is a method for selling and booking cruise packages utilizing a web browser program to electronically communicate with a cruise service web server via a data communications network. The method comprises utilizing the web browser program to log onto the cruise service web server over the data communications network, submitting to the cruise service web server customer profile information relating to a customer, and submitting to the cruise service web server customer sailing preference information relating to the customer. The method also comprises receiving a set of cruise sailings in a first electronic document from the cruise service web server that relate to the customer sailing preference information, selecting a plurality of cruise sailings from the set of cruise sailings, and submitting the plurality of cruise sailings to the cruise service web site. The method further comprises receiving detailed cruise information in a second electronic document form the cruise service web server relating to the plurality of cruise sailings, interactively comparing the detailed cruise information, submitting a booking request for one of the plurality of cruise sailings to the cruise service web site, and receiving a booking confirmation from the cruise service web site.

Another embodiment of the present invention is a cruise booking system implemented in a web server environment wherein a plurality of remote users use web browser programs to electronically communicate with the cruise booking system via a data communications network that provides information for a plurality of cruise sailings and facilitates booking of cruises. The cruise booking system comprises a customer database configured to electronically store customer data, a cruise line database configured to electronically store cruise line data, and a customer management program module configured to track and manage information relating to a plurality of customers in the customer database. The cruise booking system also comprises a cruise information program module configured

to search for and provide information about requested cruise sailings in the cruise line database and a cruise booking program module configured to book reservations for a selected cruise sailing.

An additional embodiment of the present invention is a method for booking cruises utilizing a cruise web server environment to electronically communicate with a plurality of remote users using web browser programs. The method comprises receiving a range of search criteria from a remote user's web browser, obtaining cruise package information that relates to the range of search criteria, and sending cruise package information to the remote user's web browser program. The method further comprises receiving a selected cruise package from the remote user's web browser program and booking the selected cruise package.

Another embodiment of the present invention is a network node in a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network. The network node comprises a cruise booking node responsive to a request from the user node to return cruise package information that relates to a range of search criteria and a request from the user node to book a selected cruise package from the user node.

An additional embodiment of the present invention is a system for booking cruises. The system comprises an electronic data structure of cruise package information wherein the cruise package information includes information from a plurality of cruise lines, a first program module configured to receive requests for cruise package information, and a second program module configured to obtain cruise package information from the data structure based at least upon a search request. The system also comprises a third program module configured to prepare cruise package information for electronic display, a fourth program module configured to output cruise package information for electronic display, and a fifth program module configured to book a cruise package based at least upon a booking request.

Another embodiment of the present invention is a method of assisting the community of travel agents in selling cruises to a plurality of customers in a computer system that implements a web site that is accessible to a community of travel agents using web browser programs to communicate via a data communications network. The method comprises receiving an customer identifier from a travel agent's web browser program, wherein the customer identifier represents a customer, using the customer identifier to retrieve from an electronic customer database corresponding customer information, and receiving customer preferences from the travel agent's web browser program, wherein the customer preferences include at least one of the customer's preferred dates of travel, preferred cruise destination, or preferred cruise line supplier. The method also comprises using least one of the customer preferences or the customer information to retrieve from an electronic cruise sailing database a set of potential cruise packages, transmitting the set of potential cruise packages to the travel agent's web browser program, wherein the set of potential cruise packages are viewable in a first electronic web document, and receiving an electronic identifier representing a selected cruise package from the travel agent's web browser program, wherein the selected cruise package is chosen from the set of potential cruise packages. The method further comprises booking the customer on the selected cruise package.

An additional embodiment of the present invention is a method of assisting the community of customers in selecting and booking cruises in a computer system that implements a web site that is accessible to a community of

customers using web browser programs to communicate via a data communications network. The method comprises receiving a customer identifier from a customer's web browser program, using the customer identifier to retrieve from an electronic customer database corresponding customer information, and receiving customer preferences from the customer's web browser program, wherein the customer preferences include at least one of the customer's preferred dates of travel, preferred cruise destination, or preferred cruise line supplier. The method also comprises using least one of the customer preferences or the customer information to retrieve from an electronic cruise sailing database a set of potential cruise packages and transmitting the set of potential cruise packages for display in a web document to the customer's web browser program. The method further comprises receiving an electronic identifier representing a selected cruise package from the customer's web browser program, wherein the selected cruise package is chosen from the set of potential cruise packages and booking the customer on the selected cruise package.

Another embodiment of the present invention is a system for selling cruises to a customer implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network. The system comprises a cruise search software module configured to receive a set of customer preferences from a remote user's web browser program, to search for a set of cruise packages based on at least the set of customer preferences, and to transmit the set of cruise packages to the user's web browser program; and a reservation software module configured to receive a reservation request from the user's web browser program, wherein the reservation request is selected from the set of cruise packages, and to reserve a cruise package corresponding to the reservation request.

An additional embodiment of the present invention is a computer-implemented system which implements a computer program wherein remote users search for cruise package information and book cruises over an electronic communications network. The system comprises a customer management software system configured to manage customer bookings and track customer preferences, an agent management software system configured to track travel agent interaction with customer accounts and determine and maintain records of compensation for the respective travel agents for successful customer bookings, and a cruise line management software system configured to maintain information on a plurality of cruise sailings wherein the information on the plurality of cruise sailings is used by the customer management software system to manage customer bookings and track customer preferences.

Another embodiment of the present invention is a method of assisting a community of travel agents utilizing the web browser programs to select and book cruises via electronic communication with the remote cruise booking web site in a computer system that implements web browser programs that are capable of accessing a remote cruise booking web site. The method comprises submitting an electronic customer identifier to the remote cruise booking web site, wherein the customer identifier represents a customer, determining customer preferences wherein the customer preferences represent preferred cruise sailing information, and submitting an electronic representation of the customer preferences to the remote cruise booking web site. The method also comprises receiving a set of potential cruise packages formatted for display in a first electronic web document from the remote cruise booking web site, submitting an electronic cruise package identifier representing a selected cruise package to the remote cruise booking web site, wherein the selected cruise package is chosen from the set of potential cruise packages, and submitting a booking request to the remote cruise booking web site.

An additional embodiment of the present invention is a method of assisting customers in selecting and booking cruises in a computer system that implements a web browser program that is capable of accessing a remote cruise booking web site via an electronic communications network. The method comprises submitting a customer identifier to the remote cruise booking web site, determining customer preferences wherein the customer preferences represent preferred cruise sailing information, and submitting customer preferences to the remote cruise booking web site. The method also comprises receiving a set of potential cruise packages from the cruise booking web site for display in a first web document, submitting a selected cruise package electronic identifier to the remote cruise booking web site, wherein the selected cruise package is chosen from the set of potential cruise packages, and submitting a booking request to the remote cruise booking web site.

Another embodiment of the present invention is a system for selling cruises to a customer implemented as part of a cruise web server environment wherein a plurality of remote users communicate with the system via a data communications network utilizing web browser programs. The system comprises a preferences programming module configured to receive a set of customer preferences from a remote user's web browser program, a cruise search programming module configured to search for cruises based on at least the set of customer preferences and to return a set of cruise packages to the remote user's web browser program, and a cruise comparison programming module configured to format and transmit the set of cruise packages to the remote user' web browser program. The system also comprises a reservation programming module configured to receive a reservation request from the remote user's web browser program wherein the reservation request is selected from the set of cruise packages and a cruise booking programming module configured to reserve a cruise package corresponding to the reservation request.

An additional embodiment of the present invention is a method for selling and booking cruise packages utilizing a web browser program to electronically communicate with a cruise service web server via a data communications network. The method comprises means for utilizing the web browser program to log onto the cruise service web server over the data communications network, means for submitting to the cruise service web server customer profile information relating to a customer, and means for submitting to the cruise service web server customer sailing preference information relating to the customer. The method also comprises means for receiving a set of cruise sailings for display in a first electronic document that relate to the customer sailing preference information, means for selecting a plurality of cruise sailings from the set of cruise sailings, and means for submitting the plurality of cruise sailings to the cruise service web server. The method further comprises means for receiving detailed cruise information for display in a second electronic document relating to the plurality of cruise sailings, means for interactively comparing the detailed cruise information, means for submitting a booking request for one of the plurality of cruise sailings to the cruise service web server, and means for receiving a booking confirmation from the cruise service web server.

Another embodiment of the present invention is a method for booking cruises utilizing a cruise web server environment to electronically communicate with a plurality of remote users using web browser programs. The method comprises means for receiving a range of search criteria from the remote user's web browser program, means for obtaining cruise package information that relates to the range of search criteria, and means for sending cruise package information to the remote user's web browser. The method also comprises means for receiving a selected cruise package from the remote user's web browser program and means for booking the selected cruise package.

In one embodiment, systems and methods for on-line selling and booking of cruises enable a plurality of customers, agents, and cruise lines to interact with a cruise selling and booking system via communication mediums. An interactive tool is provided for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. Customers and/or agents may search for and compare various cruise packages to find a cruise that best suits the customer needs and desires.

SYSTEMS AND METHODS OF MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS

One embodiment of the present invention is a method for selecting cruise sailings among a plurality of cruise packages utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises providing an electronic cruise sailing database wherein the electronic cruise sailing database includes detailed information about a plurality of cruise sailings for a plurality of cruise lines and receiving a set of customer preferences from a remote user's web browser. The method also comprises searching the electronic cruise sailing database for a subset of the cruise sailings that correspond to the set of customer preferences and returning the subset of the cruise sailings to the remote user's web browser for display as an electronic document.

Another embodiment of the present invention is a cruise qualification system for managing and suggesting cruise sailing data implemented in a web server environment wherein a plurality of remote users using web browser programs electronically communicate with the cruise qualification system via a data communications network. The cruise qualification system comprises an electronic cruise sailing database of cruise sailing data wherein the cruise sailing data includes data for at least two cruise lines, a customer query program module configured to send and receive queries to a user, wherein the queries include cruise preference data, and a cruise sailing search program module configured to search the electronic cruise sailing database for cruise sailing data that corresponds to the cruise preference data.

An additional embodiment of the present invention is a method for searching a cruise sailing and booking system for cruise sailing data using a web browser program to electronically communicate with a remote cruise web server via a data communications network. The method comprises submitting cruise preference data to the remote cruise web server, wherein the cruise preference data designates at least one of preferred sailing dates, preferred sailing length, preferred destination, and preferred sailing port and receiving from the remote cruise web server a set of cruise sailing data that matches or closely matches at least a portion of the cruise preference data, wherein the set of cruise sailing data is retrieved from an electronic cruise sailing database of cruise sailing data for a plurality of cruise lines.

Another embodiment of the present invention is a method for selecting cruise package information utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving a range of search criteria from a remote user's web browser program, obtaining cruise package information for a plurality of cruise lines that relates to the range of search criteria from an electronic database of cruise line data, and outputting the cruise package information to the remote user's web browser for display in an electronic document.

An additional embodiment of the present invention is a network node in a network comprising a user node having a browser program coupled to the network, the user node providing request for information on the network. The network node comprises a cruise booking node responsive to a request to obtain cruise package information from the user node that relates to a range of search criteria received from said user node, wherein the cruise package information includes information from at least two cruise lines.

Another embodiment of the present invention is a cruise selling system for selecting cruise package information implemented in a web server system wherein a plurality of remote users communicate via a data communications network with the cruise selling system using web browser programs. The cruise selling system comprises an electronic database of cruise pricing information wherein the cruise pricing information comprises information from different cruise lines and a software module programmed to receive a range of search criteria. The cruise selling system also comprises a software module programmed to obtain cruise price information from the electronic database related to the range of search criteria and a software module programmed to output cruise package information.

An additional embodiment of the present invention is a system for finding cruise package information that corresponds to a user's preferences implemented in conjunction with a web browser program wherein the web browser program communicates with a remote cruise web server system via a data communications network. The system comprises a user preference programming module configured to send a set of user preferences to the remote cruise web server system and a display programming module configured to receive a display of cruise package and pricing information corresponding to the set of user preferences.

Another embodiment of the present invention is a method for selecting cruise sailings among a plurality of cruise packages utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises means for providing an electronic cruise sailing database wherein the electronic cruise sailing database includes detailed information about a plurality of cruise sailings for a plurality of cruise lines and means for receiving a set of customer preferences from a remote user's web browser. The method also comprises means for searching the electronic cruise sailing database for a subset of the cruise sailings that correspond to the set of customer preferences and means returning the subset of the cruise sailings to the remote user's web browser for display as an electronic document.

An additional embodiment of the present invention is a method for searching a cruise sailing and booking system for cruise sailing data using a web browser program to electronically communicate with a remote cruise web server via a data communications network. The method comprises means for submitting cruise preference data to the remote cruise web server, wherein the cruise preference data designates at least one of preferred sailing dates, preferred sailing length, preferred destination, and preferred sailing port and means for receiving from the remote cruise web server a set of cruise sailing data that matches or closely matches at least a portion of the cruise preference data, wherein the set of cruise sailing data is retrieved from an electronic cruise sailing database of cruise sailing data for a plurality of cruise lines.

The present invention relates to systems and methods for matching customer preferences with available options determining customer needs which may be used for the purpose of facilitating the cruise selling and booking

process. The cruise selling and booking system is designed to store customer information and preferences and use the information to query available cruise options. The results of the query represent optimized cruise selections for which the customer will be well suited. The user quickly accesses relevant cruise package and pricing information which may be used for detailed comparisons between individual cruise packages.

SYSTEMS AND METHODS OF DISPLAYING CRUISE LINE PRICING DATA

One embodiment of the present invention is a method of presenting cruise pricing information for display by a plurality of web browser programs, wherein the method utilizes a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using the web browser programs and the cruise pricing information includes real-time pricing and availability data. The method comprises receiving a selected cruise sailing from a remote user's web browser program, identifying rate options stored in an electronic cruise line database that correspond to the selected cruise sailing, and sending the rate options to the remote user's web browser program. The method also comprises receiving a set of selected rate options from the remote user's web browser program and identifying cabin pricing categories stored in the electronic cruise line database that correspond to the selected cruise sailing and the set of selected rate options. The method further comprises obtaining cruise price information from the electronic cruise line database that corresponds to the cabin pricing categories and preparing cruise price information for display in a price summary as part of an electronic document by the remote user's web browser.

Another embodiment of the present invention is a method of filtering cruise pricing information for display to a remote user's web browser program utilizing a cruise web server environment to electronically communicate with a the remote user's web browser program via a data communications network. The method comprises receiving a selected cruise sailing from the remote user's web browser program, identifying rate options stored in an electronic database that correspond to the selected cruise sailing, and sending the rate options to the remote user's web browser program for display as an electronic document. The method also comprises receiving a set of selected rate options from the remote user's web browser program and using the set of selected rate options to retrieve pricing information from the electronic database that corresponds to the selected cruise sailing and to formulate a query that filters the pricing information based at least upon the selected rate options.

An additional embodiment of the present invention is a method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, wherein the cruise price information includes real-time pricing and availability data. The method comprises sending a first request for information on a cruise sailing to the remote cruise web server system and receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the price matrix display is displayed in the web browser program as an electronic document.

Another embodiment of the present invention is a method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises sending a first request for information on a cruise sailing to the remote cruise web server system and receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server

system. The method also comprises sending a selection of rate options from the set of rate options and receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the cruise price information corresponds to the selection of rate options and the price matrix display is displayed in the web browser program as an electronic document.

An additional embodiment of the present invention is a method of filtering cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises sending a first request for information on a cruise sailing to the remote cruise web server system, receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server system and wherein the set of rate options are formatted for display as an electronic document by the web browser program. The method also comprises selecting a selection of rate options from the set of rate options and sending the selection of rate options to the remote cruise web server system.

Another embodiment of the present invention is a method of using a computer to enable a remote user to compare cruise package pricing information from a cruise booking web server system, wherein the remote user electronically communicates with the cruise booking web server system using a web browser program via a data communications network and at least a portion of the cruise package pricing information includes real-time pricing and availability data. The method comprises receiving a request for cruise price information for at least two cruises from the remote user's web browser program, preparing the cruise price information for display in an electronic document that includes a price summary matrix, and sending the price summary matrix to the remote user's web browser program.

An additional embodiment of the present invention is a network node in a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network. The network node comprises a cruise booking node responsive to a request for cruise price information for at least two cruises from the user node wherein the cruise booking node provides the user node with a price summary of the cruise price information.

Another embodiment of the present invention is a system for displaying cruise price information implemented in a web server environment wherein a plurality of remote users communicate with the system via a data communications network using web browser programs. The system comprises an electronically stored data structure of cruise price information wherein the cruise price information includes information from different cruise lines, a program module configured to receive requests for cruise information from a remote user's web browser program, and a program module configured to obtain cruise price information from the electronically stored data structure based at least upon a price summary request. The system also comprises a program module configured to prepare cruise price information for a display as a price summary in an electronic document and a program module for outputting the prepared cruise price information to the remote user's web browser program.

An additional embodiment of the present invention is a method for analyzing cruise package pricing category information utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving a set of rate options from a remote user's web browser program, obtaining cruise package information relating to the set of rate options

from an electronic database of cruise pricing information, and outputting the cruise package information in a pricing table for display by the remote user's web browser program.

Another embodiment of the present invention is a network node in a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network. The network node comprises a cruise booking node responsive to a request from the user node, wherein the cruise booking node queries an electronic database of cruise information for cruise package information that relates to a set of rate options received from said user node and forwards the cruise package information to the user node.

An additional embodiment of the present invention is a system for analyzing cruise package information implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network. The system comprises an electronically stored data structure of cruise price information wherein the cruise price information includes information from different cruise lines and a program module configured to receive a set of rate options from a remote user's web browser program. The system also comprises a program module configured to obtain real-time cruise price information from the electronically stored data structure, wherein the obtained real-time cruise price information relates to the set of rate options and a program module for outputting cruise package information in a price summary for display by the remote user's web browser program.

Another embodiment of the present invention is a system for comparing cruise package pricing options implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network. The system comprises a cruise sailing selection software component configured to receive a request for cruise pricing information for a selected sailing from a remote user's web browser program and a pricing options software component configured to search for a set of pricing options that correspond to the selected sailing in an electronic database of cruise information, to send the set of pricing options to the remote user's web browser program, and to receive a set of selected pricing options from the remote user's web browser program. The system also comprises a pricing category software component configured to search for cruise pricing information in the electronic database of cruise information, wherein the cruise pricing information relates to the set of selected pricing options and a display software component configured to process and format the cruise pricing information for display in a pricing matrix by the remote user's web browser program, wherein the pricing matrix is organized at least in part by the pricing categories.

An additional embodiment of the present invention is a system for comparing cruise package pricing options implemented in conjunction with a web browser program, wherein the web browser program electronically communicates with a remote cruise web server via a data communications network. The system comprises a cruise sailing selection software component configured to send requests for real-time cruise pricing information to the remote cruise web server, wherein the real-time cruise pricing information is organized into pricing categories, a pricing options selection software component configured to send requests to the remote cruise web server for filtering the cruise pricing information based at least upon a set of selected pricing options, and a display software component configured to receive the requested filtered, real-time cruise pricing information from the remote cruise web server and to display

the filtered, real-time cruise pricing information using the web browser program in a pricing matrix, wherein the pricing matrix is organized at least in part by the pricing categories.

Another embodiment of the present invention is a method of presenting cruise pricing information user's web browser program utilizing a cruise web server environment to electronically communicate with a the remote user's web browser program via a data communications network. The method comprises means for receiving a selected cruise sailing from a remote user's web browser program, means for identifying rate options stored in an electronic database that correspond to the selected cruise sailing, and means for sending the rate options to the remote user's web browser program for display as an electronic document. The method also comprises means for receiving a set of selected rate options from the remote user's web browser program and means for identifying cabin pricing categories stored in the electronic database that correspond to the selected cruise sailing and the set of selected rate options. The method further comprises means for obtaining cruise price information from the electronic database that corresponds to the cabin pricing categories and means for preparing cruise price information for display by the remote user's web browser program in price summary.

An additional embodiment of the present invention is a method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises means for sending a first request for information on a cruise sailing to the remote cruise web server system and means for receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server system, wherein the set of rate options are formatted for display as an electronic document by the web browser program. The method also comprises means for sending a selection of rate options from the set of rate options to the remote cruise web server and means for receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the cruise price information corresponds to the selection of rate options.

In one embodiment, systems and methods of comparing pricing information may commence with a user access the cruise selling and booking system to search for cruise packages that meet a customer's preferences. The user may utilize the cruise selling and booking system to select a set of pricing options for which the customer may qualify. The user may then view detailed pricing information that corresponds to the set of pricing options in one or more of the available price matrices.

SYSTEMS AND METHODS OF COMPARING PRODUCT INFORMATION

One embodiment of the present invention is a method of providing cruise package and pricing information for comparison utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving a selection of at least two cruise packages from a remote user's web browser program, and obtaining cruise package and pricing information that corresponds to the at least two cruise packages from an electronic database of cruise data. The method also comprises preparing the cruise package and pricing information for display in an electronic web document and sending the prepared cruise package pricing information to the remote user's web browser program.

Another embodiment of the present invention is a method of using a computer to compare cruise package and pricing information utilizing a cruise web server environment to electronically communicate via a data communications

network with a plurality of remote users using web browser programs. The method comprises receiving a request for cruise package and pricing information for at least two cruise different cruise lines from a remote user's web browser program, retrieving cruise package and pricing information that corresponds to the request from a database of electronically stored cruise line data, and outputting the cruise package and pricing information for display as an electronic document by the remote user's web browser program.

An additional embodiment of the present invention is a method of requesting cruise package and pricing information for comparison using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises sending a request to the remote cruise web server system for cruise package and pricing information for at least two different cruise lines and receiving cruise package and pricing information from the remote cruise web server system that corresponds to the request, wherein the cruise package and pricing information was retrieved from an electronic database of cruise line data and the cruise package and pricing information is formatted for side-by-side display by the web browser program.

Another embodiment of the present invention is a method of using a computer to book a cruise package using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises sending a request to the remote cruise web server system for cruise package and pricing information for at least two cruise different cruise ships and receiving from the remote cruise web server system the cruise package and pricing information for the at least two different cruise ships, wherein the cruise package and pricing information is displayed in a side-by-side display using the web browser program.

An additional embodiment of the present invention is a network node in a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network. The network node comprises a cruise booking node responsive to a request to retrieve cruise package and pricing information for at least two different cruise lines from the user node, wherein the cruise booking node retrieves cruise package and pricing information from an electronic database for display in an electronic document and sends the cruise package and pricing information to the user node.

Another embodiment of the present invention is a system for comparing cruise packages implemented in a web server environment, wherein a plurality of remote users using web browser programs electronically communicate with the system via a data communications network. The system comprises an electronically stored data structure of cruise package and pricing information wherein the cruise package and pricing information includes information from different cruise lines, a program module configured to receive a display request from a remote user's web browser program, and a program module configured to obtain cruise package and pricing information from the electronically stored data structure based at least upon the display request. The system also comprises a program module configured to prepare the obtained cruise package and pricing information for display in an electronic web document, and a program module configured to output to the remote user's web browser program the prepared cruise package and pricing information for display in the electronic web document.

An additional embodiment of the present invention is a method of organizing cruise package and pricing information for display utilizing a cruise selling and booking web server system to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises

receiving a first identifier corresponding to a first cruise package from a remote user's web browser program, retrieving a first set of cruise package and pricing information from an electronic database, wherein the first set of cruise package and pricing information corresponds to the first identifier, and receiving a second identifier corresponding to a second cruise package from the remote user's web browser program. The method also comprises retrieving a second set of cruise package and pricing information from the electronic database, wherein the second set of cruise package and pricing information corresponds to the second identifier, formatting at least a portion of the first set of cruise package and pricing information and at least a portion of the second set of cruise package and pricing information for display in a side-by-side comparison section of an electronic document, wherein the side-by-side comparison section includes at least a first window and a second window, and returning to the remote user's web browser program the formatted at least a portion of the first set of cruise package and pricing information and at least a portion of the second set of cruise package and pricing information.

Another embodiment of the present invention is a method of using a computer to compare cruise package information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises sending a request for a first set of cruise package and pricing information to the remote cruise web server system and sending a request for a second set of cruise package and pricing information to the remote cruise web server system. The method also comprises receiving from the remote cruise web server system the first set of cruise package and pricing information in a first window of a display, wherein the display is included in a web document accessible by the web browser program, and receiving from the remote cruise web server system the second set of cruise package and pricing information in a second window of the display.

An additional embodiment of the present invention is a method of providing cruise package information for display utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving a request for cruise package and pricing information from a remote user's web browser program, determining whether a card is available; if there is no card available, returning an error message to the remote user's web browser program, and if card is available, retrieving the requested cruise package and pricing information from an electronic database of cruise data and returning to the remote user's web browser program the cruise package and pricing information for electronic display in an available card.

Another embodiment of the present invention is a system for comparing cruise package information implemented in conjunction with a web browser program, wherein the web browser program communicates with a remote cruise web server system via a data communications network. The system comprises a selection software component configured to send requests to the remote cruise web server system for cruise package and pricing information for at least two cruise packages and a display software component configured to display in the web browser program the requested cruise package and pricing information for the at least two cruise packages in a side-by-side display as part of an electronic document.

An additional embodiment of the present invention is a method of providing cruise package and pricing information for comparison utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises means

for receiving a selection of at least two cruise packages from a remote user's web browser program and obtaining cruise package and pricing information that corresponds to the at least two cruise packages from an electronic database of cruise data. The method also comprises means for preparing the cruise package and pricing information for display in an electronic web document and means for sending the prepared cruise package pricing information to the remote user's web browser program.

Another embodiment of the present invention is a method of using a computer to book a cruise package using a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises means for sending a request to the remote cruise web server system for cruise package and pricing information for at least two cruise different cruise ships and means for receiving from the remote cruise web server system the cruise package and pricing information for the at least two different cruise ships, wherein the cruise package and pricing information is displayed in a side-by-side display using the web browser program.

The present invention relates to systems and methods for comparing multiple sets of information in a compare display. One embodiment of the invention includes a system for displaying cruise package and pricing information in side-by-side windows wherein the user may replace the contents of each of the windows with an alternate selection of cruise package and pricing information. The compare display enables the users to compare accurately the detailed cruise package and pricing information.

SYSTEMS AND METHODS OF MAINTAINING CLIENT RELATIONSHIPS

One embodiment of the present invention is a system for tracking agent interaction with customers implemented in a web server environment wherein a plurality of remote users utilizing web browser programs electronically communicate with the system via a data communications network. The system comprises an electronic customer database configured to store information about a plurality of customers and an electronic agent database configured to store information about a plurality of agents. The system also comprises an electronic rules database configured to store rules that define temporal relationships between the plurality of customers and the plurality of agents and an agent ownership program module in communication with the customer database, the agent database, and the rules database, wherein the agent ownership program module is configured to control agent access to information about the plurality of customers in the customer database based at least upon the temporal relationships between the plurality of customers and the plurality of agents.

Another embodiment of the present invention is a method for managing agent ownership of customers utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving and agent identifier that represents an agent from a remote user's web browser program, receiving a customer identifier that represents a customer from the remote user's web browser program, and verifying that the customer is available for interaction with the agent by querying an electronic database of agent and customer information. The method also comprises receiving an agent activity from the remote user's web browser program and determining a time window for agent activity based at least upon at least one agent ownership rule, wherein the at least one agent ownership rule is stored in the electronic database. The method further comprises creating an agent of record association between the agent and the customer

wherein the agent is designated as the customer's agent of record for the allotted amount of time and storing the agent of record association in the electronic database.

An additional embodiment of the present invention is a method of verifying agent ownership of a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving an agent identifier representing an agent from a remote user's web browser program, receiving a customer identifier representing a customer from the remote user's web browser program, and retrieving a customer record from an electronic customer database, wherein the customer record corresponds to the customer and the customer record includes an agent of record. The method also comprises determining whether the agent of record corresponds to the agent represented by the agent identifier and returning a message to the remote user's web browser program signifying whether the agent of record corresponds to the agent represented by the agent identifier.

Another embodiment of the present invention is a method for changing an agent of record association between an agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving an agent identifier representing an agent from a remote user's web browser, receiving a customer identifier representing a customer from the remote user's web browser, and receiving an activity that represents a communication between the agent and the customer from the remote user's web browser. The method also comprises retrieving a customer record from an electronic database, wherein the customer record corresponds to the customer and the customer record includes an agent of record association, setting the agent of record association to correspond to the agent represented by the agent identifier, and storing the agent of record association in the electronic database.

An additional embodiment of the present invention is a method for tracking and maintaining relationships among clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises submitting an agent identifier that corresponds to an agent to the remote cruise web server system, submitting a customer identifier that corresponds to a customer to the remote cruise web server system, and receiving agent ownership information from the remote cruise web server system, wherein the agent ownership information corresponds to the customer and the customer's assigned agent signifying whether the agent may proceed with working with the customer.

Another embodiment of the present invention is a method for using an agent ownership system to update an existing relationship between clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises submitting an agent identifier that corresponds to an agent to the remote cruise web server system and submitting a client identifier to the remote cruise web server system that corresponds to a client with whom the agent has an existing relationship. The method also comprises submitting an agent activity to the remote cruise web server system and receiving a time period for which the relationship is valid from the remote cruise web server system.

An additional embodiment of the present invention is a method of identifying an agent of record utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving a customer identifier representing a

customer from a remote user's web browser, retrieving a customer record from an electronic customer database, wherein the customer record corresponds to the customer identifier, and determining whether an agent of record has been assigned to the customer record. The method also comprises returning an agent of record designator to the remote user's web browser if the agent of record has been assigned and returning an available agent designator to the remote user's web browser if the agent of record has not been assigned.

Another embodiment of the present invention is a method for overriding an agent of record association between a first agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving an agent identifier representing a second agent from a remote user's web browser program, receiving a customer identifier representing a customer from the remote user's web browser program, and retrieving agent of record data corresponding to the customer identifier from an electronic database. The method also comprises setting the agent of record data to the agent identifier, receiving an expiration date from the remote user's web browser program, and retrieving agent of record data from the electronic database, wherein the agent of record data corresponds to the customer identifier. The method further comprises setting the agent of record data to correspond to the agent identifier and the expiration date and storing the agent of record data in the electronic database.

An further embodiment of the present invention is a method of creating an agent of record association between an agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises receiving an agent identifier representing an agent from a remote user's web browser program, receiving customer information about a customer from the remote user's web browser program, and creating a customer record. The method also comprises creating an agent of record association between the customer and the agent and storing the customer record in an electronic database.

Another embodiment of the present invention is a system for tracking agent interaction with customers implemented in conjunction with a web browser program, wherein the web browser program electronically communicates with a remote cruise web server system via a data communications network. The system comprises an agent identifier program module configured to submit to the remote cruise web server system an agent identifier that corresponds to an agent and a client identifier program module configured submit to the remote cruise web server system a client identifier that corresponds to a client with whom the agent has an existing relationship. The system also comprises an agent activity program module configured to submit to the remote cruise web server system an agent activity wherein the agent activity corresponds to the agent identifier and the client identifier and a time program module configured to receive a time period for which the relationship is valid from the remote cruise web server system.

An additional embodiment of the present invention is a method for managing agent ownership of customers utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The method comprises means for receiving and agent identifier that represents an agent from a remote user's web browser program, means for receiving a customer identifier that represents a customer from the remote user's web browser program, and means for verifying that the customer is available for interaction with the agent by querying an electronic database of agent and customer information. The

method also comprises means for receiving an agent activity from the remote user's web browser program and means for determining a time window for agent activity based at least upon at least one agent ownership rule, wherein the at least one agent ownership rule is stored in the electronic database. The method further comprises means for creating an agent of record association between the agent and the customer wherein the agent is designated as the customer's agent of record for the allotted amount of time and means for storing the agent of record association in the electronic database.

Another embodiment of the present invention is a method for tracking and maintaining relationships among clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network. The method comprises means for submitting an agent identifier that corresponds to an agent to the remote cruise web server system, means for submitting a customer identifier that corresponds to a customer to the remote cruise web server system, and means for receiving agent ownership information from the remote cruise web server system, wherein the agent ownership information corresponds to the customer and the customer's assigned agent signifying whether the agent may proceed with working with the customer.

In one embodiment, systems and methods are used to maintain client relationships by tracking and managing customers and agents involved in booking a cruise. Furthermore, various activities which take place between an agent and active customers are monitored, whereby the type and quantity of activities performed by the agent is evaluated to assign a period of time of ownership of the customer. During the period of time while the customer is owned, other agents are prevented from acquiring the customer and subsequent booking commission. A series of rules which determine the duration of ownership of the customer are maintained and applied to enable the ownership to be changed as needed.

For purposes of summarizing the invention, certain aspects, advantages, and novel features of the invention are described herein. It is to be understood that not necessarily all such advantages may be achieved in accordance with any particular embodiment of the invention. Those skilled in the art will recognize that the invention may be embodied or carried out in a manner that achieves one advantage or a group of advantages as taught herein without necessarily achieving other advantages as may be taught or suggested herein.

CONCLUSION OF SUMMARY

These and other features will now be described with reference to the drawings summarized below. These drawings and the associated description are provided to illustrate embodiments of the invention, and not to limit the scope of the invention. Throughout the drawings, reference numbers are re-used to indicate correspondence between referenced elements. In addition, the first digit of each reference number indicates the figure in which the element first appears.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 illustrates a high-level block diagram of one embodiment of the present invention.

Figure 2A illustrates a high-level block diagram of one embodiment of the present invention.

Figure 2B illustrates a high-level block diagram of an additional embodiment of the present invention.

Figure 3A illustrates a high-level block diagram of one embodiment of cruise selling and booking system.

Figure 3B illustrates a high-level block diagram of an additional embodiment of cruise selling and booking system.

Figure 4 illustrates a flowchart of one embodiment of the cruise selling and booking process.

Figure 5 illustrates one embodiment of a main menu display.

Figure 6 illustrates one embodiment of a customer search display.

Figure 7 illustrates one embodiment of a qualification display.

Figure 8 illustrates one embodiment of a pricing and availability display.

Figure 9 illustrates one embodiment of a rate option or pricing options display.

Figure 10 illustrates one embodiment of a price matrix display.

Figure 11A illustrates one embodiment of a compare display.

Figure 11B illustrates an additional embodiment of a compare display.

Figure 11C illustrates an additional embodiment of a compare display.

Figure 12 illustrates one embodiment of a cruise booking worksheet display.

Figure 13 illustrates one embodiment of a reservation information display.

Figure 14 illustrates one embodiment of a payment information display.

Figure 15 illustrates a high-level block diagram of one embodiment of a qualification module.

Figure 16 illustrates a flow chart of one embodiment of employing a customer information acquisition process during customer qualification.

Figure 17 illustrates a flow chart of one embodiment of employing a pre-qualification process during customer qualification.

Figure 18 illustrates a flow chart of one embodiment of employing a qualification query process during customer qualification.

Figure 19 illustrates a high-level block diagram of a price comparison module.

Figure 20 illustrates one embodiment of a pricing matrix.

Figure 21 illustrates an additional embodiment of a pricing matrix.

Figure 22 illustrates one embodiment of a flow chart of a pricing options selection process.

Figure 23 illustrates one embodiment of a flow chart of a price matrix process.

Figure 24 illustrates a high-level block diagram of a comparison module.

Figure 25 illustrates one embodiment of a compare display template.

Figure 26 illustrates one embodiment of a flow chart of a compare display process.

Figure 27 illustrates one embodiment of a flow chart of a user selection process.

Figure 28 illustrates a high-level block diagram of one embodiment of an agent ownership module.

Figure 29 illustrates a flow chart of one embodiment of creating an agent of record relationship.

Figure 30 illustrates a flow chart of one embodiment of identifying an agent of record.

Figure 31 illustrates a flow chart of one embodiment of verifying an agent of record.

Figure 32 illustrates a flow chart of one embodiment of changing an agent of record.

Figure 33 illustrates a flow chart of one embodiment of overriding an agent of record.

Figure 34 illustrates a high-level block diagram of one embodiment of agent of record activities.

Figure 35 illustrates a state diagram of one embodiment of customer states.

Figures 36A through 36L are one embodiment of a database model.

DETAILED DESCRIPTION

SYSTEMS AND METHODS OF ON-LINE BOOKING OF CRUISES

The present invention relates to systems and methods for on-line selling and booking of cruises. Figure 1 illustrates one embodiment of the invention wherein a plurality of customers, agents, and cruise lines interact with a cruise selling and booking system 110 via communication mediums 120 such as the Internet 425. Cruise lines may interact directly with the cruise selling and booking system 110 and/or via a cruise line interface system 130 that stores information for one or more cruise lines. The cruise selling and booking system 110 in the illustrated embodiment provides an interactive tool for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. The customer may obtain information about the cruise lines utilizing components of the cruise selling and booking system 110 directly or through interaction with an agent. The customer is thus able to find information about various cruises packages and to book a cruise package either with or without the interaction of an agent utilizing a series of resources as will be discussed in greater detail below and illustrated in subsequent figures.

I. On-line Booking of Cruises

An overview of one embodiment of a cruise selling and booking system 110 is shown in Figure 2A. In the exemplary system, a customer contacts an agent via a telephone and the agent uses a computer (hereinafter "agent computer 240") to connect to the Internet 125 and to communicate with the cruise selling and booking system 110. In one embodiment, the cruise selling and booking system 110 includes a server component 210, a cruise selling and booking component 220, and a database collection 230. In one embodiment, the database collection 230 includes a customer database 232, a cruise line database 234, an activity database 236, and an agent database 238. It is recognized that the information stored in the database collection 230 may be discretely stored in multiple independent databases, combined in a single database, or a combination thereof.

Using the agent computer 240, the agent accesses the components of the cruise selling and booking system 110 to find information about the customer, to provide the customer with information about cruise sailings from the cruise line database 234, and to book cruise packages as desired by the customer. Additionally, the agent may collect and store information about the customer in the customer database 232 and may further access resources of the agent database 238 which stores information relating to the agent and his customers, allowing the agent to better manage his customer communication, scheduling, and interactions.

In another embodiment, shown in Figure 2B, a customer may access resources of the cruise selling and booking system 110 using a computer (hereinafter "customer computer 250") via the Internet 125. In one embodiment a customer may have access to a portion of the functions and resources to which an agent has access, for example, allowing the customer to compare and book cruises with or without additional interaction with an agent. It is recognized that in other embodiments a customer may have the same or greater access. In further embodiments, both agents and customers may access the cruise selling and booking system 110.

One sample process of selling and booking a cruise will now be described wherein an agent is interacting with the cruise selling and booking system 110. It is recognized that in other embodiments, however, the same and/or similar process may be used by a customer to book a cruise.

The agent uses the agent computer 240 to log onto the website and to submit customer identification information to the cruise selling and booking system 110. The cruise selling and booking system 110 receives the customer identification information, searches for the appropriate customer data in the customer database 232, and returns the related customer information to the agent computer 240. In one embodiment, the cruise selling and booking system 110 may also manage requests for adding new customers to the customer database 232 and/or updating customer information for existing customers in the customer database 232.

The agent may then use the customer information to help the customer define a set of cruise preferences. The customer information may include, for example, booking history, favorite cruise lines, destinations, travel dates, and so forth. The agent may then submit the customer's cruise preferences to the cruise selling and booking system 110. The cruise selling and booking system 110 receives the cruise preferences and queries the cruise line database 234 for cruise packages that are a close match to the submitted cruise preferences. In other embodiments, the cruise selling and booking system 110 may receive cruise package information from other sources such as, for example, by directly contacting individual cruise lines, by contacting third party booking engines, by querying proprietary databases, and so forth. After receiving the cruise package information, the cruise selling and booking system 110 compiles and returns the cruise sailings that match the customer's preferences and may also return other cruise sailings that may be of interest to the customer.

In one embodiment, the cruise selling and booking system 110 compiles and formats the returned query cruise package information from the various databases, cruise lines, and/or booking engines in a uniform manner so as to allow the information to be presented in a user-friendly format. In one embodiment, the cruise selling and booking system 110 may also store information received from databases, cruise lines, and/or external booking engines in the cruise line database 234.

The agent receives the cruise package information and may discuss the various packages with the customer. In one embodiment, the cruise package information may include cabin availability and/or pricing information.

When the customer has decided which cruise to book, the agent sends a cruise reservation/booking request to the cruise selling and booking system 110. The cruise selling and booking system 110 receives the cruise reservation/booking request and verifies the availability of the space aboard the cruise line of interest and returns a cruise reservation/booking confirmation to the agent. If the customer, however, decides not to book a cruise, the cruise selling and booking system 110 may store the customer's cruise preferences and/or the returned cruise sailing information in the database collection 230.

II. Benefits of On-line Booking of Cruises

The cruise selling and booking system 110 allows a customer and/or agent to search for and compare the various cruise packages to find a cruise that best suits the customer needs and desires. One benefit of one embodiment is that customers and/or agents have access to up-to-date cruise package information from multiple cruise lines without having to spend unnecessary quantities of time requesting and compiling information independently from each cruise

line. Because the cruise selling and booking system 110 is available for immediate access via the communication mediums 120, the customers and/or agents may request information such as pricing and cabin availability and receive accurate and timely responses. The information is desirably accessible throughout all hours of the day and is typically not dependent on the cruise line having service representatives provide the information to the customer or agent via traditional telephone and facsimile communication.

Another benefit of one embodiment is that the cruise selling and booking system 110 may take into account customer flexibility by enabling the customer to specify a range of preferences. For example, the customer may want to search for cruises that depart anytime during a seven-day period or for cruises traveling to a general region of the world. In addition, the cruise selling and booking system 110 may select cruises that may be of interest to the customer but are different from those specified in the customer's cruise package preferences. For example, the cruise selling and booking system 110 may search for cruises packages that depart on dates before or after those specified by the customer, cruise packages that provide special discounts for attributes that match the customer's profile (e.g., a children cruise free), cruise packages that match preferences that the customer previously requested, as well many other cruise packages.

An additional benefit of one embodiment is that the cruise selling and booking system 110 may be utilized by agents and/or customers. In some embodiments, the cruise selling and booking system 110 may provide different functionality in comparing and searching cruises to agents, whereas in other embodiments, the customers and agents may have access to the same functionality.

A further benefit of one embodiment is that the cruise selling and booking system 110 allows for accurate and visually accessible comparisons of cruise packages. The agent/customer computer 240, 250 may display and compare detailed sets of competing cruise packages at the same time so as to facilitate identifying similarities and differences among cruises. Thus, the value of a particular cruise may be readily compared to help the customer and/or agent identify those cruises which both suit the customer's preferences and provide the customer with the most luxury and options for the money the customer is willing to spend.

Another advantage of one embodiment is that the cruise selling and booking system 110 provides a single system that finds cruises which best suit the needs of the customer; interacts with the database collection 230 and cruise lines to perform functions related to reserving and booking of the selected cruise; processes and manages payment information such as credit card or bank account information to collect payments for the selected cabins on the cruise ship and cruise sailing of choice; and upon receiving confirmation from the cruise line that the cabin has been booked, passes the confirmation information to the customer and/or agent to finalize the transaction.

An additional advantage of one embodiment is that the cruise selling and booking system 110 advantageously includes a number of customer management features increasing productivity and booking success rates. As discussed above, a customer information database may store detailed information about each customer such that the customer and/or agent may be able to input, update, and retrieve customer information. This detailed information helps the agent recall the individual characteristics of the customers with whom he interacts and provides a useful tool for improving customer relations. For example, in addition to personal information such as name, address, and contact numbers, the agent may store information about the customer's cruise preferences and previous sailing experiences to help create an

appropriate cruise package for the customer without repeatedly questioning the customer. The customer feels more at ease and enjoys a more personable experience in cruise booking when the agent can recall his personal information which may otherwise be forgotten by agents who deal with numerous individuals on a daily basis.

An additional benefit of one embodiment is that customers and/or agents may use customer information to match upcoming cruises with customers who would be potentially interested in purchasing based on personal preferences and previous sailing experiences. Cruises which the customer may be more likely to able to afford, may be prioritized in favor of more expensive cruises. The cruise selling and booking system 110 may use the customer's marital status, age, occupation, and/or recreational interests to tailor the cruise search to include cruises which cater to people of similar interests. Use of customer information to select cruises increases productivity and booking success rates of the agent when interacting with customers in a number of ways, such as, for example, reducing the amount of time used to collect customer information, establishing a better rapport with customers by personalizing the interaction and having detailed customer history at hand without the customer having to provide the same information each time they contact the agent, allowing the agent to quickly assess which cruises are best suited for an individual customer, and providing detailed comparisons of various cruises and pricing levels to help the customer decide which cruise to select.

Furthermore, one advantage of one embodiment is that the cruise selling and booking system 110 provides an intuitive, easy-to-use interface. The cruise selling and booking system 110 may be implemented using a highly portable language and format. In one embodiment, the cruise selling and booking system 110 may be implemented in a centralized server environment accessible via the Internet 125 by multiple users on various platforms running a myriad of standard browser applications. The customer and/or agent's setup costs and installation time required to access the cruise selling and booking system 110 is minimized and updates to the cruise selling and booking system 110 can be provided at the centralized server location without causing customer or agent interruption.

III. On-line Selling and Booking System

In one embodiment, the agents and/or customers interact with computers to access the cruise selling and booking system 110 via communication mediums 120.

A. Communication Mediums

The communication mediums 120 as shown in Figures 2A and 2B include the Internet 125. The Internet 125 is a global network of interconnected computers capable of sending and receiving information between one another. The structure of the Internet 125, which is well known to those of ordinary skill in the art, includes a network backbone comprising communications channels such as copper wire, optical fiber, or satellite based interconnections between numerous computers, hubs, and routers which control, direct, and maintain information passed between computers. Additional networks branch from the above-mentioned backbone, and these branches, in turn, have sub-networks branching from them, and so on. Typically, information is passed through the network in the form of packets which are discrete pieces the information desirably sent through the network. These packets of information are encoded in a form interpretable by the network infrastructure and may support features such as data compression, encryption, and error correction to optimize the speed and efficiency by which the information is transferred. For a more

detailed description of the structure and operation of the Internet 125, please refer to "The Internet Complete Reference," by Harley Hahn and Rick Stout, published by McGraw-Hill, 1994.

One popular segment of the Internet 125 is the World Wide Web (or Web). The World Wide Web comprises many thousands of computers which utilize the Internet 125 infrastructure to serve and distribute information. Typically, a server system is capable of two-way communication with other computers and can desirably send information to other computers which request the information or content stored on the server system. The information stored on the server system is typically interpreted using a software package known as a browser, which is capable of displaying graphical, textual, audio and/or visual information.

Some of the server systems, which provide information on the World Wide Web, are often referred to as "websites" and interact with other computers on the World Wide Web. Generally, each website has an associated electronic page or series of electronic pages which the server sends to those computers requesting the information. The requested information generally takes the form of an electronic page (or web page) encoded in one or more specific languages that is interpreted by the requesting computer and the browser which it runs. Several such languages commonly used by web servers include, but are not limited to, Hypertext Markup Language ("HTML"), JAVA, JAVA Script, Extensible Markup Language ("XML"), Active Server Pages ("ASP"), and CGI scripting. The web page provides the requesting computer with a document that organizes the presentation of the information into a display using text, graphical images, audio, and/or video. Furthermore, the computer, on which the online document is viewed, may communicate with the website by sending and receiving information through interface objects such as, for example, fields, buttons, pull down menus, and key entered commands. For a more detailed description on the World Wide Web, please refer to "How to Set Up and Maintain a World Wide Web Site" by Lincoln D. Stein, published by Addison-Wesley Publishing Company, 1995.

One of ordinary skill in the art will recognize that the communication mediums 120 may be advantageously be comprised of one or more types of networks without detracting from the invention. The communication mediums 120 may include, by way of example, local area networks ("LANs"), wide area networks ("WANs"), public internets, private internets, a private computer network, a secure internet, a private network, a public network, a value-added network, interactive television networks, wireless data transmission networks, two-way cable networks, interactive kiosk networks, digital subscriber lines, cable modem lines, and the like. The disclosed invention is thus suitable for providing connectivity through many different forms of communication mediums 120, however, it will be further discussed in the context of connecting through the Internet 125. In addition, it is recognized that one or more networks may be used to access the cruise selling and booking system 110. For example, a customer may interact with the cruise selling and booking system 110 via the Internet 125, an agent may interact with the cruise selling and booking system 110 via a LAN, and/or the cruise lines may interact with the cruise selling and booking system 110 via a wireless data transmission network. In another embodiment, the customers, agents, and cruise lines may all access the cruise selling and booking system 110 via the Internet 125.

B. User Computer

The agent computer 240 and/or customer computer 250 ("user computer 240, 250") shown in Figures 2A and 2B are devices that allow the customer or agent to interact with cruise selling and booking system 110 via the

communication mediums 120. In one embodiment, the user computer 240, 250 is a conventional personal computer equipped with a modem, Ethernet card, or other component which allows the computer to send and receive information through the communication mediums 120. Preferably, the user computer 240, 250 runs an appropriate operating system such as the Microsoft® Windows® 3.1, Microsoft® Windows® 98, Microsoft® Windows® 98 Second Edition®, Microsoft® Windows® Millennium Edition®, Microsoft® Windows® NT, Microsoft® Windows® 2000, Microsoft® Windows® CE, PalmOS®, Apple® MacOS®, Linux®, Solaris®, IRIX®, UNIX®, or IBM® OS/2® operating systems. As is conventional, a preferred operating system further includes a TCP/IP stack or other communications protocol which handles all incoming and outgoing message traffic passed over the communication mediums 120.

In other embodiments, the user computer 240, 250 may, for example, be a computer workstation, a local area network of individual computers, an interactive television, an interactive kiosk, a personal digital assistant, an interactive wireless communications device, cellular phone, or the like which interacts with the communication mediums 120. While in such systems, the operating systems may differ, the various operating systems may continue to provide the appropriate communication protocols needed to establish communication links with the communication mediums 120.

In one embodiment, the user computer 240, 250 utilizes several operational modules (not shown) including a customer or agent browser module. The browser module is a software program which allows a consumer to access different content providers through the communication mediums 120. In one embodiment, the browser module is the Netscape® Navigator developed by Netscape, Inc. or the Microsoft® Internet Explorer developed by Microsoft Corporation. One of ordinary skill in the art, however, will recognize that numerous other types of access software may also be used to implement an embodiment of the present invention. These other types of access software may, for example, include other types of Internet browsers, custom network browsers, two-way communications software, cable modem software, point-to-point software, and the like.

While the agent computer 240 and customer computer 250 are referred to as user computers 240, 250, it is recognized that the agent computer 240 and customer computer 250 may be implemented using different or the same hardware and/or software.

C. Cruise Selling and Booking System

In one embodiment, the cruise selling and booking system 110 includes a server component 210, a cruise selling and booking component 220, and a database collection 230 as illustrated in Figure 3A.

As used herein, the words component and module refer to logic embodied in hardware or firmware or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, C++, VISUAL BASIC, JAVA, C, FORTRAN, JAVA Script, and so forth. A software component/module may be compiled and linked into an executable program, or installed in a dynamic link library, or may be written in an interpretive language such as BASIC. It will be appreciated that software components/modules may be callable from other components or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware components/modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised

of programmable units, such as programmable gate arrays or processors. The components described herein are preferably implemented as software components/modules, but may be represented in hardware or firmware.

1. Server Component

In one embodiment, the cruise selling and booking system 110 includes a server component 210, as shown in Figure 3A, that interacts with the cruise selling and booking component 220 and with the user computers 240, 250 via the communication mediums 120. The server component 210 may be configured to process messages from the user computer 240, 250, to send requests to the cruise selling and booking component 220, and to send response messages to the user computer 240, 250.

In one embodiment, the server component 210 is implemented as a web server which serves content over the Internet 125 using languages such as, the Hyper Text Markup Language ("HTML"). The web server may accept requests from browsers, such as, for example, the Netscape® Navigator or the Microsoft® Internet Explorer, and return the requested document(s) to the browsers. The web server may also utilize scripting programs, such as, for example, CGI scripts, SSL security, and Active Server Pages ("ASP") to provide additional functionality. A wide variety of web servers may be used to implement the server component 210, such as, for example, AOLserver, the Apache server, the iServer, Microsoft IIS v5.0 server, Microsoft Site server, Netscape Enterprise server, WebSite Pro server, Xitami server, and so forth. Furthermore, the server component 210 may also be implemented using a variety of other servers, such as, for example, the BlueStone Sapphire server, the Interop server, a Netscape Server, an Oracle server, a SilverStream server, the Sybase Enterprise Server, the WebObjects server, and so forth. In addition, the server component 210 may be implemented using a variety of computer systems, such as, for example, a conventional general purpose computer using one or more microprocessors, such as, for example, a Pentium processor, a Pentium II processor, a Pentium Pro processor, an xx86 processor, an 8051 processor, a MIPS processor, a Power PC processor, or an Alpha processor, running a variety of platforms, such as, for example, Mac OS, OpenLinux, Red Hat Linux, Sun Solaris, SGI IRIX, Novel NetWare, Windows NT Server 4.0, and/or Windows 2000 Server.

2. Cruise Selling and Booking Component

In one embodiment, the cruise selling and booking system 110 includes a cruise selling and booking component 220, as shown in Figure 3A, that interacts with the server component 210 and the database collection 230. In other embodiments, it is recognized that the cruise selling and booking component 220 may also interact with external sources, such as, for example, proprietary cruise line systems, banking/financial systems, other travel agencies, external databases, and so forth. In one embodiment, the cruise selling and booking component 220 processes search requests from the server component 210, queries the database collection 230 and/or external sources for requested information, receives the query results from the various sources, processes the results, compiles the results into a set of data, and formats the results for presentation to the user via the server component 210.

The exemplary cruise selling and booking component 220 of Figure 3A includes a cruise selling and booking process 310, a customer module 320, a cruise module 330, and a booking module 340. The cruise selling and booking process 310 guides the user through searching for cruise packages and booking a selected package. The exemplary customer module 320 includes a customer add process 322 that adds new customers to the customer database 232, a customer search process 324 that queries the customer database 232, and a customer update process 326 that

updates an existing customer's information. The exemplary cruise module 330 includes a cruise information add process 332 that adds information about the cruise lines, the cruise ships, the cruise sailings, and/or the cruise packages to the cruise database, a cruise search process 334 that queries the cruise database, a cruise qualification process 336 that receives a set of cruise preferences and finds cruise sailing and/or cruise price information that matches the set of cruise preferences, and a cruise comparison process 338 that receives identifiers for multiple cruise sailings or packages and returns detailed information about the identified objects in a comparison format. The exemplary booking module 340 includes a cruise booking process 342 that receives cruise reservation/booking information and books the corresponding cruise package, and a cruise payment process 344 that receives cruise payment information and forwards the payment information to the appropriate entity.

An additional embodiment of a cruise selling and booking component 220 is illustrated in Figure 3B. In addition to the customer module 320, the cruise module 330, and the booking module 340, the cruise selling and booking component 220 also includes an agent ownership module configured to track and manage agent of record relationships, a customer qualification module 360 configured to match a customer's preferences with a variety of cruise package options, a price comparison module 370 configured to present the user with pricing options and to provide price matrices of detailed pricing information, and a comparison module 380 configured to provide side-by-side comparisons of various cruise package and pricing information.

It is recognized that in other embodiments, the cruise selling and booking component 220 may include other processes (not shown) that provide information from the database collection 230 as well as other external sources.

The cruise selling and booking component 220 may be implemented using a variety of software and hardware components. For example, the cruise selling and booking component 220 may include a set of electronic page documents that are written in HTML code, ASP scripts, and so forth. As is well known in the art, standard HTML documents are web documents wherein the structure and layout are defined by a variety of tags and attributes and are capable of being read by standard browsers. Active Server Pages ("ASP") is a server-based, script language developed by Microsoft Corporation that allows for the dynamic generation of HTML code via server and client program scripts. Rather than maintain separate script programs and electronic page documents, the script programs may be embedded in the active server pages to form a set of "smart" electronic page documents. As is well known in the art, ASP documents do not need to be compiled, they can run on any browser, and may allow the transfer of information from the database collection 230. For a more detailed description of Active Server Pages, please refer to "ASP in a Nutshell: A Desktop Quick Reference," by A. Keyton Weissinger, published by O'Reilly & Associates, Inc., 1999.

In addition, the cruise selling and booking component 220 may include additional software modules programmed in variety of languages for processing user requests, performing data lookup, compiling sets of data, formatting data, and so forth.

In one embodiment, the cruise selling and booking component 220 is implemented on the same component as the server component 210, though it is recognized that in other embodiments, the cruise selling and booking component 220 may be implemented in a separate component. For more information on the types of computers and/or platforms that may be used to implement the cruise selling and booking component 220, please see the section above entitled "Server Component."

3. Database Collection

In one embodiment, the cruise selling and booking system 110 includes a database collection 230, as shown in Figures 3A and 3B, that stores data about the customers, the cruises lines, the activities, and the agents. The exemplary database collection 230 includes four databases, a customer database 232, a cruise line database 234, an activity database 236, and an agent database 238.

The customer database 232 includes information about the customers. Such information may include name, address, phone number, cruise history, cabin preference, family information, age, travel destination preference, as well as other travel-related information.

The cruise line database 234 may include information about various cruise lines, various cruise ships, and various cruise sailings. The information about specific sailings may further include information such as ship name, number, sailing destination, departure dates, number of cabins, cabin categories, dining room capacity, viewable maps of the ship, as well as other detailed cruise line information. In addition, the cruise line database 234 may include information such as cabin availability and pricing data. In one embodiment, the cruise line database 234 data may be entered manually by a travel agent or downloaded/received from the cruise lines and/or other sources.

In one embodiment, the cruise line database 234 enables information about the various cruise lines to be stored in a single database or database collection. The cruise lines have a myriad of data that is organized differently according to each cruise line. For example, the cruise lines tend to use their own proprietary naming and pricing schemes; they individually select how the data is selected, stored, and configured; and some cruise lines may provide data that other cruise lines do not. For example, many cruise lines use their own system for categorizing cabins and have also use their own pricing schemes.

In some embodiments, the cruise line database 234 may normalize all of the data from the various cruise lines into a uniform system. In other embodiments, the cruise line database 234 may be configured to accommodate a wide variety of data. For example, the cruise line database 234 may include a table of categories in which each cruise line may have its own unique set of categories ranked from most luxurious to most economical thus maintaining the individuality of each cruise line while at the same time enabling the various cruise line data to be compared. The cruise line database 234 may, for example, provide pricing information for the most luxurious cabins for cruise sailings on Cruise Line A and Cruise Line B even though the cruise lines use different cabin naming nomenclature and different category structures.

The activity database 236 includes information about the activities in the cruise selling and booking system 110. These activities may include brochures, leads, quotes, reservations, bookings, as well as other ongoing activity information. In one embodiment, the activity database 236 is closely linked with the customer database 232, the cruise line database 234, and the agent database 238.

The agent database 238 includes information about the agents that use the cruise selling and booking system 110. Agent information may include the agents' logins, passwords, access privileges, company, address, phone numbers, booking history, current commission, and so forth.

While the database collection 230 depicted in Figures 3A and 3B includes four separate databases, it is recognized that in other embodiments, the database collection 230 may include other databases and/or some of the exemplary databases may be combined.

In one embodiment, the database collection 230 may be implemented with Structured Query Language ("SQL") code. The structured query language is a language standardized by the International Standards Organization ("ISO") for defining, updating, and querying a relational database. It is recognized however, that other code may be used to access the database collection 230. For example, in one embodiment, the database collection 230 may interact with various accessory programs to store, retrieve, and process the information of the databases, such as, for example, dynamic link libraries ("DLLs"). DLLs (not shown) may interact with the server component 210, the cruise selling and booking component 220, and the database collection 230 directly, or with the database collection 230 via a database manipulation module, such as, for example, a Microsoft Database Access Object ("DAO"). The execution of the DLL may be called automatically from within the scripts or routines of the web page documents as needed and may not necessarily require the customer or agent explicitly launch a separate program or series of programs.

In one embodiment, the database collection 230 is implemented using a relational database, such as, for example, those sold by Oracle Corp. or Sybase. It is recognized however that other relational databases may be used and/or other types of databases may be used, such as, for example, object oriented databases, flat file databases, and so forth. Furthermore, the database collection 230 may be implemented as a single database with separate tables or as other data structures that are well know in the art such as linked lists, binary trees, and so forth.

In one embodiment, the database collection 230 is implemented as a separate component or separate components from the cruise selling and booking component 220 and/or the server component 210, though it is recognized that in other embodiments, the database collection 230 may be implemented on the same component as the cruise selling and booking component 220 and/or the server component 210. For more information on the types of computers and/or platforms that may be used to run the database collection 230, please see the section above entitled "Server Component."

As noted above, one embodiment that is implemented using a web server ("web server environment") provides several advantages. First, the web server environment does not require any dedicated hardware or software to be installed on the customer or agents computer which will utilize the cruise selling and booking system 110. This advantage may apply to both customers and agents in that they do not have the burden of expense normally associated with purchasing or licensing a dedicated system. Second, maintenance and upgrades of the cruise selling and booking system 110 may be centrally administrated and automatically processed with little or no intervention by those using the cruise selling and booking system 110. For example, the cruise line database 234 may be updated without the customer's knowledge. In addition, each computer which connects to the cruise selling and booking system 110 automatically receives and connects with the most appropriate software as determined by the web server of the cruise selling and booking system 110. In addition, the interactive interface of the cruise selling and booking system 110, like many interactive web pages, uses the familiar environment of a web browser running on the computer the customer or agent uses, thus, minimizing the learning time required to operate and become proficient with the cruise selling and booking system 110.

4. One Embodiment of a Database Collection

One embodiment of the database collection 230 will now be described in detail, however, it is recognized that in other embodiments, different types of database schemes, tables, and/or fields may be used. For a more detailed description of this embodiment, please refer to Appendix A.

In one embodiment, the database collection 230 includes a client database, a supplier database, a case database, a staff member database, as well as a set of replicated tables. As is well known in the art, in one embodiment, the database collection 230 may be normalized, however, in other embodiments, various tables of the database collection 230 may be replicated so as to allow faster database access.

In one embodiment, the client database, which may also be referred to as a customer database 232, includes a variety of tables. The client database may include the following tables: client, company, recent activity, notes, cruise line, passenger, passenger medical needs, users, cruise ships, cruise activity, phone information, client supplier assignment, cruise group member, cruise frequent information, clients, payment header, passenger special occasion, consumer information, past sailing supplier, cruise region, cruise subregion, address information, household, cruise port, medical need, and cruise special occasion. Each of the tables may include several fields. For example, the company table may include fields such as, company name, company I.D., company areas, mailing address, city, state, zip code, country, time zone, phone, extension, fax, website address, contract number, primary contact, secondary contact, industry, notes, user name, and so forth. In addition, the passenger table may include fields such as, client user name, passenger user name, qualification date, home gateway, staff user name, home gateway type, home gateway abbreviation, status, air requested, user name, and so forth. A detailed description of one embodiment of a client database, including tables, fields, types and keys is illustrated in Appendix A.

In one embodiment, the supplier database, which may also be referred to as the cruise line database 234, also includes a variety of tables. The supplier database may include the following tables: supplier work payment detail, payment detail, cruise inventory contract, payment header, ship, company supplier, company CRS, cancellation detail, brochure, booking balance, unit commission paid, supplier, line item air, air class, finance, line item package, insurance information, insurance verification, itinerary, line item, itinerary cabin category, itinerary detail, itinerary region, customer refund, cruise air contract, cruise frequent information, supplier frequent level, supplier contract, supplier card, company, refund details, supplier contact address, rate, payment advice, matrix flight rule, air contract matrix, air contract, past sailing supplier, location package, package, cruise package, line item detail, supplier location, supplier TRNX field, supplier geographic region, transaction history, supplier note, cruise line, supplier product, supplier rank, supplier SABRE regions, supplier TRNX, supplier TRNX field value, and so forth. Each of the tables may include several fields. For example, the cruise air contract table may include fields such as cruise inventory contract number, location type number, location abbreviation, ship code, supplier number, start date, itinerary name, airline number, air counting code, class, and so forth. In addition, the insurance information table may include the fields supplier number, high booking amount, maximum number of nights, and so forth. A detailed description of one embodiment of the supplier database, including tables, fields, data types, and keys, is illustrated in Appendix A.

In one embodiment, the cases database, which may also be referred to as an activity database 236, includes a variety of tables. The cases database may include the following tables: cases, insurance verification, label print queue,

booking balance header, mark down, mark down reason, passenger, synchronized audit, work payment detail, refund, refund request header, payment booking, payment detail, case note, case information, invoice comments, cancellation header, booking balance detail, aging report, audit aging commission, agent commission paid, line item, and so forth. Each of the tables may include several fields. For example, the refund table may include fields such as, refund I.D., case I.D., refund reason I.D., refund type I.D., disbursement batch number, refund status, refund amount, override address flag, void refund flag, middle initial, card expiration month, credit card expiration year, four digit code, look up by, look up by date, look up program, insert by, insert date, insert program, card number, card zip code, name on card, first name, last name, authorization user, void refund user, and so forth. In addition, the line item table may include fields such as case I.D., line item number, user name, location type number, supplier number, to location, from location, line item type number, roll up flag, departure date, arrival date, expiration date, parent line item number, status, quantity purchased, total sale, total tax, total commission, insert date, look up date flag, and so forth. A more detailed description of one embodiment of the cases database, including tables, fields, data types and keys, is illustrated in Appendix A.

In one embodiment, the staff member database, which may also be referred to as an agent database 238, includes a variety of tables. The agent database 238 may include the following tables: time tracker, time tracker type, time tracker, user, user groups, alert groups, groups, group permissions, permission areas, permissions, activities, position type, activity tasks, pay type, staff member address, address type, marital status type, employee language, language type, phone type, staff member phone, employee remark type, company property type, employee company property, employee status, employee status type, contract type, benefit type, employee contract, approved time sheet, employee benefit, team manager, team, time tracker manager, pay period, department, company department, time zone, company, staff department, clients, staff members, and so forth. Each of the tables may include several fields. For example, the permissions table may include fields such as, permission name, permission description, area name, core permission, is group permanent, is audience permanent, and so forth. In addition, the pay period table may include fields such as, for example, pay period I.D., pay period I.D. description, look up date, base date, look up by, number of days, look up program, insert date, insert by, insert program, and so forth. A detailed description of one embodiment of the staff members database, including tables, fields, data types, and keys, is illustrated in Appendix A.

In one embodiment, the database collection 230 may replicate several of the tables, as previously discussed, so as to improve database access time. Appendix A also includes a list of tables that may be replicated in order to improve processing time.

While Appendix A illustrates one embodiment of a detailed database collection 230, it is recognized that various implementations of the database collection 230 may be used. In addition, as previously discussed, other types of databases and/or other data structures may be used to implement the database collection 230.

IV. Accessing the Cruise Selling and Booking System

In one embodiment, both customers and agents may access the cruise selling and booking system 110.

A. Customer Access

In one embodiment, a customer may access the cruise selling and booking system 110 without necessarily interacting with an agent as illustrated in Figure 2B. For example, a customer may access the cruise selling and booking

system 110 via a web-based service by utilizing a standard web browser on his own computer to connect to the cruise selling and booking system 110 web page. The customer may initiate a session by manually entering the cruise selling and booking system 110 web site address in the appropriate field of the browser, or the connection may be established automatically by configuring the browser to access the cruise selling and booking system 110 web page upon opening a browser window. When the connection has been established, the cruise selling and booking system 110 uses web pages to visually prompt the customer for input, collect information from the customer, and/or interactively guide the customer through the process of finding, pricing, and/or booking a cruise package. The information which is sent to the customer is formatted and visually presented in an easy to interpret manner and allows the customer to quickly and accurately find cruise packages which suit the customer's preferences. In one embodiment, should the customer desire the assistance of an agent, the cruise selling and booking system 110 may automatically store the information entered by the customer in the database collection 230 and an agent with access to the cruise selling and booking system 110 may subsequently retrieve the information. This feature provides improved customer/agent interactivity by saving customers from repeating information previously entered in the cruise selling and booking system 110 to each agent with whom they interact.

B. Agent Access

In another embodiment, the agent may use an agent computer 240, similarly configured as the customer computer 250 described above, to access the cruise selling and booking system 110 as illustrated in Figure 2A. In one embodiment, agents and customers may access different cruise selling and booking systems 110 or the same cruise selling and booking system 110. Moreover, agents and customers may be given different types of access to the cruise selling and booking system 110. For example, the cruise selling and booking system 110 may permit an agent to access additional resources and web pages of the cruise selling and booking system 110 to which the customer may not have access such as commission information. Furthermore, in one embodiment, different agents may have different types of access to the cruise selling and booking system 110 depending on their status, such as, for example, agent in training, seasoned agent, manager, and system administrator.

In one embodiment, an agent may access the cruise selling and booking system 110 via a web-based service by utilizing a standard web browser on his computer to connect to the cruise selling and booking system 110 web page either manually or automatically as discussed above. When the connection has been established, the agent may access several features of the cruise selling and booking system 110. For example, an agent may access an interface to enter customer information into the cruise selling and booking system 110 databases for later retrieval. The agent may also search information stored in the cruise line database 234, such as detailed information and summaries with more complete descriptions and statistics of each cruise, detailed pricing and availability information about each cruise including actual cost and percentage markups. The agent may also narrow the number of cruises to be selected from based on a customer's profile and preferences and compare multiple cruise packages in a side-by-side manner. Furthermore, the agent may access cruise ship reservation, confirmation, booking, and payment features. These features allow the agent to sell and book cruises over the Internet 125.

V. Cruise Selling and Booking System Processes

The cruise selling and booking system 110 includes several processes, as shown in Figure 3A, such as, a cruise selling and booking process 310, a collection of customer module 320 processes, a collection of cruise module processes 330, and a collection of booking module 340 processes.

A. Cruise Selling and Booking Process

One embodiment of an overview of a cruise selling and booking process 310 is illustrated in Figure 4 and will now be described in more detail. For purposes of illustration, Figure 4 will be described wherein the user is an agent though it is recognized that in other embodiments the user may be a customer.

Beginning at a start state (block 410), the cruise selling and booking process 310 proceeds to a login state (block 420) wherein the cruise selling and booking process 310 verifies the agent's login and password. Proceeding to a customer search state (block 430), the cruise selling and booking process 310 receives a set of customer identification information, and searches and retrieves the corresponding customer information from the customer database 232. Proceeding to a qualify state (block 440), the cruise selling and booking process 310 receives a set of customer preferences and searches and retrieves cruise sailing information that matches the customer's preferences. Proceeding to a cruise detail state (block 450), the cruise selling and booking process 310 receives selected cruise sailings and searches and retrieves detailed information, such as pricing and availability, for the selected cruise sailings. Proceeding to a booking state (block 460), the cruise selling and booking process 310 receives a selected cruise package and books the selected cruise package with appropriate cruise line. Proceeding to a payment state (block 470), the cruise selling and booking process 310 receives and processes the customer's payment information and proceeds to an end state (block 480).

Exemplary screen displays will now be discussed to further describe the various status of the cruise selling and booking process 310. The screen displays illustrate one embodiment of the invention, and it is recognized that in other embodiments, other screen displays may be used and/or other interfaces may be used such as a touch screen, a hand held device, or other interfaces.

1. Login

In the start state (block 410), the process initializes and then proceeds to the login state (block 420) wherein the agent performs standard login procedures that are well known in the art. The login process ensures that only authorized users may access the web site and contents of the cruise selling and booking system 110 and/or determines the appropriate level of access for each user. Login procedures by entry of a username and password specifying a valid agent account on the cruise selling and booking system 110 are typically used to provide validation of the agent's status, though it is recognized that other procedures may be used. Securing the web site and allowing access to only authorized users is well known and readily understood by those of skill in the art. Once the agent attempts to login by sending the agent's assigned login identification and secure password to the cruise selling and booking process 310, the cruise selling and booking process 310 looks up the agent's login identification in the agent computer 240 database and verifies the agent's password. If the agent's login identification is not found or the password was not verified, then the cruise selling and booking process 310 returns an error message to the agent computer 240. If the agent's login identification is found and the password is verified, the cruise selling and booking process 310 proceeds to the customer search state (block 430).

a. Main Menu

In one embodiment, upon successful login, the agent is directed to a main menu web page, as illustrated in Figure 5, which includes user interface tools, such as buttons or links, for accessing the various features of the cruise selling and booking system 110. For example, the exemplary main menu 510 display allows the agent to access features such as selling and booking 520, back office 530, inventory management 540, product management 550, and administrative features 560. The main menu 510 serves as a starting point for each of the features described above. In one embodiment, the agent may return to the main menu 510 throughout the cruise selling and booking system 110 process.

The main menu 510 may also provide the agent with an activity listing 570 which may include categories for bookings 571, brochures 572, leads 573, options 574, and quotes 575. In Figure 5, each of the categories has an associated numerical value that indicates the number of currently active customers which fall into the activity listing 570 category. The purpose of the activity listing 570 is to provide the agent with a quick summary of information for those customers he should contact. Each activity listing 570 enables the agent to access a listing of the customers who fall within the activities groups described above. In the illustrated embodiment, the agent may select any of the activity listings 570 which will then direct him to a separate screen showing the details of the selected activity listing 570.

Additionally, the main menu may include a "to do" list 580 which includes subcategories such as phone calls 581 and tasks 582. The "to do" list 580 provides a reminder for activities for which the agent should initiate and follow up. In a similar manner to the activity listing 570 above, the agent may select any of the items in the "to do" list 580 in order to access a listing of customers who fall within the subcategories as well as information for contacting the customers.

To proceed to the customer search state (block 430), the agent may select the Selling and Booking feature.

2. Customer Search

Proceeding to the customer search state (block 430), the agent is directed to a search web page 610, illustrated in Figure 6, wherein the agent may select among a set of options related to searching customer information. In the exemplary search web page 610, the agent may search for customers based on data entered in fields which correspond to the information stored in the customer database 232.

The customer information may be organized in a set of fields 620 that are indexed within the database so as to be retrievable individually or in groups by the search process. For example, the exemplary query fields 620 allow the agent to search for a customer in a number of ways including the customer's last name 621, first name 622, state 623, zip code 624, phone number 625, customer number 626, order number 627, and/or reservation number 628.

After the agent enters the search information, the agent computer 240 sends the customer information to the cruise selling and booking system 110. The cruise selling and booking process 310 then receives the customer information and searches for customers in the customer database 232 that match the submitted information. If no matching customers are found, the cruise selling and booking process 310 sends a message to the agent computer 240 that no search results were found. If matching customers are found, the cruise selling and booking process 310 formats and returns the results of the search to the agent computer 240. The agent computer 240 displays the list of

matching customers as a set of search results 630 and allows the agent to select a customer 631 and designate the selected customer as the "active customer." For a more detailed description of one embodiment of the search state (block 430), see the section below entitled "Customer Module Processes – Customer Search Process."

When a customer is active, the agent computer 240 and/or the cruise selling and booking system 110 may use the customer's stored information to enhance the cruise selling and booking process 310 as will be discussed in greater detail below.

The cruise selling and booking process 310 may also allow the agent computer 240 to perform additional searches wherein the agent may change the information contained in the search query fields 620 to find other customers. When a new search is performed the results of the previous search are discarded and the results of the new search are displayed in the search results section 630 of the search web page 610.

As discussed above, when a matching customer is found, the agent may select the customer and proceed to the qualification process state (block 440).

3. Qualification

In the qualification state (block 440), the cruise selling and booking process 310 receives a customer's preferences and finds cruise sailings that match the customer's preferences. The qualification state allows the agent to reduce the number of cruise sailings he may present to the customer and to focus on the more appropriate cruise sailings. In the cruise industry, it is typical that there are many available cruises sailings which a customer could take within a specified time frame. In order to reduce the amount of time the agent spends describing individual cruise packages to the customer, it is more efficient and less frustrating to the customer to first narrow the choices of cruise sailings based on the customer's preferences. In one embodiment, the cruise selling and booking process 310 reduces or eliminates cruises of which the customer has no interest or cannot book based on a series of selectable criteria.

The customer's sailing preferences may include a variety of factors and may be based on information about the customer from the customer database 232, such as, for example, booking history, preferred suppliers, and/or future destinations, as well as new information from the customer such as, for example, number of passengers per cabin, currently preferred destination, and so forth. In other embodiments, the customer's sailing preferences may include the price range; the desirable range of dates and duration of the cruise in which the customer is willing or able to participate; the desired destination or region of the world where the cruise will travel to as well as the home gateway from which the cruise ship will depart; the cruise ship supplier or company which the customer may have preference for including specific cruise ships within a cruise line's fleet; and/or special conditions pertaining to the customer which might make him eligible for discounted rates or particular sailings.

Figure 7 illustrates one embodiment of customer preference web page 710 or qualification display with a preference section 720. In the exemplary qualification display 710, the preferences section 720 includes number of persons per cabin 721, dates of travel 722, home gateway 723, number of nights of travel 724, day of embarkation 725, and port of embarkation 726. In addition, the preferences section 720 enables the agent to view a set of travel regions 727, itineraries 728, suppliers 729, ships 730, and/or ports 731. In addition, the agent may search by supplier contract number 732. In one embodiment, the cruise selling and booking system 110 may generate such information

from the database collection 230, however, it is recognized that in other embodiments, the information may be entered in whole or in part as separate data or not included at all.

In the exemplary qualification display 710, the agent has restricted the search to cruises allowing two persons per cabin, from September 8, 2001 to September 16, 2001 sailing for seven nights, and departing on any day of the week.

When the agent has entered the appropriate information listed above, the agent computer 240 submits the customer's sailing preferences to the cruise selling and booking system 110. The cruise selling and booking process 310 receives the information and searches for cruise sailings in the cruise line database 234 that fall within the range of the submitted criteria.

If no matching cruise sailings are found, the cruise selling and booking process 310 may inform the agent computer 240 that no sailings were found, or the cruise selling and booking process 310 may return cruise search results 740 that include a set of "suggested" cruise sailings that do not meet the criteria but still may be of interest to the customer. Such "suggested" cruise sailings may be selected on the basis of several factors. For example, the cruise selling and booking process 310 may suggest cruises sailings that depart on dates before or after those specified by the customer, cruise sailings that provide special discounts for attributes that match the customer's profile (e.g., children cruise free), cruise sailings that match preferences that the customer has previously requested, as well many other cruise sailings.

If matching cruise sailings are found, the cruise selling and booking process 310 sends a set of matching cruise sailings to the agent computer 240. As described above, the cruise selling and booking process 310 may also include a set of suggested cruise sailings with the matching cruise sailings. For a more detail description of one embodiment of the qualification state (block 440), please see the section below entitled "Cruise Module Processes – Cruise Qualification Process."

After the agent computer 240 receives the set of cruise sailings, the agent may select a subset of the cruise sailings and send them to the cruise selling and booking process 310 and proceed to the cruise detail state (block 450).

Figure 7 illustrates an exemplary set of cruise search results 740 that enables the agent to view and select number of cruise sailings by marking the "check box" 742 that corresponds to the selected cruise package. An exemplary cruise search results section 740 is shown in Figure 7 wherein the first cruise package is the Carnival Tropicale ship scheduled to depart on September 8, 2001 for a seven day cruise to the Western Caribbean. The agent has selected the Carnival Tropicale, the Princess Dawn Princess, and the Royal Caribbean Explorer of the Seas. In one embodiment, the cruise selling and booking process 310 may also include guidelines for ranking the order in which the cruise sailings are displayed and/or provide separate designations for "matching" and "suggested" cruise sailings, such as, for example, by availability, by departure date, by average cost, and so forth. In Figure 7, the agent has selected three cruise sailings and may proceed to the cruise detail state (block 450).

It is recognized that Figure 7 illustrates one embodiment of a cruise search results section 740 and that in other embodiments, other cruise search results sections 740 may be used. For example, in another embodiment, the cruise search results section 740 may include information about pricing, such as Block pricing and/or FIT pricing information, as well time stamp information indicating when the information was last updated by time and date.

4. Cruise Detail

In the cruise detail state (block 450), the cruise selling and booking process 310 receives the selected cruise sailings and retrieves additional details about the cruise sailings such as, for example, availability, rate options, pricing information, package information, and so forth.

In one embodiment, the cruise selling and booking process 310 enables the agent to select a cruise sailing, view and select available rate options for the selected cruise sailing, view pricing information based on the selected rate options, and compare sailing/pricing information for multiple cruise sailings. For a more detailed description of one embodiment of the cruise detail state (block 450), please see the section below entitled "Cruise Module Processes – Cruise Comparison Process."

Figure 8 illustrates one embodiment of a cruise detail web page 810 wherein the agent computer 240 is presented with a list of the selected cruise sailings in the "Select A Cruise" section of the display 820. In the exemplary cruise detail web page 810, the agent has selected three cruise sailings, the Carnival Tropicale, the Princess Dawn Princess, and the Royal Caribbean Explorer of the Seas. From those sailings, the agent may choose to view additional information which is displayed in a "Cruise Detail" section 830.

Figure 9 illustrates one embodiment of the cruise detail web page 810 after the agent has selected the Princess Dawn Princess, and the cruise selling and booking process 310 has retrieved the available rate options 910 for the Princess Dawn Princess and placed them in the "Cruise Detail" section 830. Rate options, also referred to as pricing options, are the representative pricing categories that the agent selects for the customer. Each cruise sailing has a variety of rate options that set the prices for the multiple categories of cabins. Travel agents use the rate options along with other pricing information to find the best rate for the customer while at the same time maximizing their own commission. Due to the large number of possible rate options for each of the multiple cabin categories, it is often useful for the agent to limit the pricing information of each sailing to a smaller subset of information based on the customer's profile and preferences. In one embodiment, the cruise selling and booking process 310 may restrict the number of rate options that may be selected (e.g. to four or five). These rate options may include the discounts associated with package deals for air and extended stay vacation. Other examples include local resident discounts, senior discounts, group rates, and so forth. The display in Figure 9 includes a rate option "code" 912, name and detail of the code 914, the dates for which each code is valid 916, as well as the status of the option 918. In the exemplary display, the user has selected rate code BNPTPXUSD for the Princess Dawn Princess cruise sailing.

It is recognized that Figure 9 illustrates one embodiment of available rate options 910 and that in other embodiments, other available rate options 910 may be used. For example, in other embodiments, different types of data may be displayed and/or some of the data may be excluded from the display.

Figure 10 illustrates one embodiment of a cruise detail web page 810 wherein the prices for the available cabin categories for the designated sailing that match the selected rate options are displayed in a price matrix 1010. The exemplary display 810 shows the "Best Price" matrix 1010 which includes a category code 1011, an upgrade field 1012, cabin category type 1013, promotion price 1014, best full tariff price 1015, best agency price 1016, and pricing description information 1017.

The exemplary price matrix 1010 displays the pricing information for the selected rate options in table format with heading descriptions at the top of the table such that each row includes information that corresponds with an individual pricing plans. For example, for category 6D, the GG promotional rate is $99999.00, the Best Fit price is $3400.00 and the Best TRVL price is $2900.00. In one embodiment, the cruise selling and booking process 310 may return a "not available" designation (e.g., "N/A") if no cabins are available in that category. To the left of each pricing plan option, there is an arrow 1018 that enables the agent to open a window directly underneath the row in question that will display the specifics of the pricing plan. There is also another arrow 1019 that enables an agent to select a pricing category for display. In one embodiment, the price matrix may include functionality to further refine the searching criteria. For example, the default for the passenger field is two persons, upon changing an entry in a field of the price matrix window, the entire pricing scheme may be updated in real time.

In addition, the price matrix may be altered such as, for example, by reducing the number of viewed items (e.g., when the agent selects "Show Selected"), displaying additional detailed information regarding a sailing, as well as showing all of the locations of cabins, lounges, and entertainment on any selected ship (e.g., when the agent selects "Deck"). In one embodiment, the agent may switch between a variety of price matrices such as, for example, a price matrix with the "best price" information, a price matrix with detailed information, a price matrix with airfare information, and so forth. For example, in the exemplary display of Figure 10, the agent is viewing the "Best Price" matrix and may select the "Detail" button 1020 to display a "Detail" price matrix with detailed information on the Princess Dawn Princess cruise sailing on September 9, 2001.

In one embodiment, the agent computer 240 may select another cruise from the "Select A Cruise" section 820 and view more detailed information about the newly selected cruise in the "Cruise Detail" section 830.

While the cruise detail display 810 may, in one embodiment, display details for one cruise package at a time, the display may also include a side-by-side compare display section 1110 as depicted in Figure 11A. The side-by-side compare display 1110 allows the agent to evaluate a number of specific sailings, under specific criteria, in a side-by-side comparison. The windows may be cleared and populated with new information.

The agent may choose to add one of the categories of the sailing in the cruise detail section to the compare display by selecting a category in the price matrix 1010. In the exemplary display, the category may be sorted by selecting the arrow 1019 in the price matrix. It is recognized that in other embodiments, the agent may select a category using other user interface techniques that are well known in the art. In one embodiment, the compare display 1110 may allow the user to display detailed information of up to N different cruise categories at one time where N is an integer determined, for example, by the size of the display. The exemplary compare display 1110 of Figure 11A allows the user to display up to three different cruise categories at one time (N=3).

The cruise selling and booking process 310 receives the agent's selections of specific pricing categories from "Cruise Detail" section 830, retrieves the relevant information, and places the information in an available compare display window 1112, 1114. For example, in the exemplary compare display 1110, the ship information, and the associated sailing date is located in an information bar. In one embodiment, the compare display information includes itinerary type, rate options, number of nights for which the cruise sails, category, and so forth. The compare display 1110 may also provide the agent with access to a number of other features. For example, the agent may hold an

"option" for the customer or "book" a reservation using the buttons below the information bar. Furthermore, the agent may "quote" a price to the customer that will last for a predetermined amount of time. The agent may also place a cabin "on hold" for a predefined amount of time. If the requested cabin is not available, then the agent may request another cabin. In addition, by selecting the "Clear" button 1116, the agent may remove the specific pricing information from the compare display and allow for the window to either remain open or be filled with another selected set of category price information.

In one embodiment, all of the windows may be compared simultaneously and a scrolling feature may be initiated ensuring that all of the windows will display the same sets of information to agent at the same time. Thus, when the agent scrolls down the first window in the display, the other windows will also scroll down simultaneously. Furthermore, when one set of data is removed and another is added, it will appear in the same position as the other two, so that the information display may remain synchronized.

The cruise details and pricing information displayed in Figures 8, 9, 10, and 11 illustrate various embodiments of the invention, however, it is recognized that in other embodiments different sets of cruise detail information may be presented to the agent computer 240. In addition, access to the cruise detail may also be presented to the agent computer 240 in a different layout. For example, the price matrix may be arranged by price rather than rate options and categories. Furthermore, in some embodiments, some of the pricing information may be restricted if the user is a customer. For example, the price matrices may display a brochure price and an Internet discount price rather than providing the customer with all possible pricing schemes, though it is recognized in other embodiments, the customer may have access to all pricing information.

After comparing the various cruise packages, the agent may inquire as to whether the customer wants to book one of the cruise packages. If the customer has not found the right package, the agent may view more cruise details and/or modify the customer's cruise package criteria.

If the customer has decided to book one of the cruise packages, the cruise selling and booking process 310 may then proceed to the booking state (block 460).

5. Bookings

Proceeding to the booking state (block 460), the cruise selling and booking process 310 requests more detailed information about the customer and the customer's selected cruise package. In one embodiment, the cruise selling and booking system 110 presents the agent computer 240 with a cruise booking web page 1210 as shown in Figure 12. The exemplary cruise booking web page 1210 includes a booking worksheet 1220, wherein pricing information may be viewed per passenger, in total, as well as according to the agent's commission. The worksheet 1220 includes standard cruise pricing information 1212, such as, cabin fees, government fees, and port charges. In addition, the worksheet 1210 includes an air and miscellaneous section 1214 that permits the agent to adjust the prices to include excursions (e.g., helicopter tour, mountain biking trip, day hike, snorkeling outing, etc.), pre-paid expenses, air fares, additional air, pre-post add-on, other add-ons, miscellaneous fees, tour conductor fees, coupons, and so forth. Furthermore, the exemplary worksheet 1210 includes a section for taxes and fees 1216.

In one embodiment, the agent computer 240 may submit reservation information pertaining to the cruise package such as cabin number, deck level, location, bed type, special requests, smoking preference, dining reservations,

as well as other related information as illustrated in Figure 13. The exemplary reservation information web page 1310 includes a general information section 1320, a cabin section 1330, a dining request section 1340, and an option section 1350. The general information section 1320 includes information about the cruise package, such as, for example, Trip Start Date, Trip End Date, Itinerary, Supplier Contract Number, Order Number, Rate Option, Agent of Record, and so forth. The cabin section 1330 includes information about the reserved cabin, such as, for example, cabin number, status, deck, location, smoking preference, bath type, bed type, and so forth. The dining request section 1340 includes information about the dining options, such as seating, status, table size, smoking preference, and so forth. The option section 1350 includes information about the option, such as expiration, extension date, final payment due date, a use extension date field, and so forth.

After the agent computer 240 submits the information, the cruise selling and booking process 310 may assign a customer order number. For a more detailed description of the booking state (block 460), please refer to the section below entitled "Booking Module Processes – Cruise Booking Process." After the agent submits the booking information, the cruise selling and booking process 310 proceeds to the payments state (block 470).

6. Payments

In the payments state (block 470), the cruise selling and booking process 310 receives the customer's payment information from the agent computer 240, and directs the funds to appropriate entities preferably via a back office process.

In one embodiment, the cruise selling and booking process 310 may contact the cruise lines and other third parties directly or via a separate system to provide payment information. For a more detailed description of the payment state (block 470), please refer to the section below entitled "Booking Module Processes – Cruise Payment Process."

After the cruise selling and booking system 110 receives payment information, the back office process verifies that the customer's payment is valid and that the appropriate entities are paid.

Figure 14 illustrates one embodiment of a payment information web page 1410. The "Credit Card Information" section 1420 includes information about the customer's credit card and/or debit card such as card number, expiration date, name as it appears on the card, zip code of card holder, authorization code, and so forth. The "Supplier" section 1430 includes information about the various suppliers in the cruise package that require payment. Suppliers may include, for example, the cruise line, excursion groups, travel insurance companies, airlines, and so forth.

While an overview of the process of online booking of cruises has been discussed, it is recognized that other methods of booking online cruises may also be used. For example, the cruise selling and booking process 310 may use only a subset of the discussed states such as using only the qualified state, the cruise detail state, and/or the booking state. In addition, in other embodiments, the customer may interact directly with the cruise selling and booking system 110 without the assistance of an agent or with partial assistance from an agent.

B. Customer Module Processes

In one embodiment, the cruise selling and booking system 110 may also include a customer module 320 that includes a collection of customer module 320 processes. The exemplary customer module 320 processes shown in Figure 3 include a customer add process 322, a customer search process 324, and a customer update process 326.

1. Customer Add Process

In one embodiment, the customer module 320 may include a customer add process 322 that permits the agent to add new customers to the customer database 232. When the new customer function is selected, a series of fields are displayed on the agent computer 240 in a web page document. The agent enters customer information into the fields which may include first name, last name, gender, phone number, address, e-mail address, birth date, age, interests, hobbies gateway city, marketing information, cabin preferences, favorite excursion activities, and so forth. As illustrated above, the customer information may include standard contact information as well as social and recreational activities in which the customer may be interested in participating, on-shore activities such as shopping, dining, and events which may require prior reservations to attend, and so forth. In one embodiment, all of the above fields need not all be filled in at the time of adding a customer. For example, the agent may store any information he has entered and return at a later time to add additional customer information as it becomes available. In some embodiments, however, one or more fields may be optionally tagged so as to require certain information to be entered within the field before proceeding to a subsequent function. In addition, data validation techniques may be used to ensure that only proper customer information is entered in the database (e.g., credit card check, phone number validation, email validation, etc.) For more information on the customer information, please refer to the section above entitled "Customer Database."

In one embodiment, adding new customers or editing existing customer information may occur during the time when an agent is in communication with a customer. The agent is able therefore to populate the customer information fields by asking the customer about the appropriate information which should be entered enabling the agent to construct a detailed customer profile.

2. Customer Search Process

In one embodiment, the customer module 320 may also include a customer search process 324 that permits the agent to search for existing customers in the customer database 232.

As discussed above, the customer search process 324 receives a set of search criteria. The search criteria may include information, such as, the customer's last name, first name, state, zip code, phone number, customer number, order number, and/or reservation number. The customer search process 324 then formulates a query and sends the query to the customer database 232. Next, the customer search process 324 receives the query results from the customer database 232. If there are no items in the query results, the customer search process 324 returns a "No Results Found That Match Your Query" message. If there are items in the query results, the customer search process 324 organizes the search query results or part of the query into a data structure, such as, for example, a table or a list, and returns the query results. In one embodiment, a user may then select the item that matches the customer for which he is searching. If there is only one item in the query results, the customer search process 324 may instead return a display of the corresponding data for the single search query result, rather than a one item list of search results, thus permitting the user to bypass the selection of the item from the list.

3. Customer Update Process

In one embodiment, the customer module 320 may also include a customer update process 326 that permits the agent to update an existing customer's record in the customer database 232.

As discussed above, the customer update process 326 may incorporate part or all of the customer search process 324 enabling the user to find the customer for which he would like to update the record. Next, the customer update process 326 receives a set of data that has been entered by the user. In one embodiment, the customer update process 326 receives a copy of the entire data record, whereas in other embodiments, the customer update process 326 may only receive copies of the data record that were changed and/or added. The customer update process 326 then determines which data fields have been updated and sends an update request with the changed data to the customer database 232. In one embodiment, the customer update process 326 may send a message to the user signifying whether the update was successful.

C. Cruise Module Processes

In one embodiment, the cruise selling and booking system 110 may also include a cruise module 330 that includes a collection of cruise module 330 processes. The exemplary customer module 320 processes shown in Figure 3A include a cruise information add process 332, a cruise search process 334, a cruise qualification process 336, and a cruise comparison process 338.

1. Cruise Information Add Process

In one embodiment, the cruise module 330 may include a cruise information add process 332 that adds cruise information to the cruise line database 234.

Cruise information may be collected from a variety of sources. For example, information may be collected from the travel agents, the cruise lines, a cruise line clearing house system, and so forth. Thus, the cruise information add process 332 may receive data from users at web site browsers, via automatic downloads, via import functions, and so forth.

The cruise line information may include, for example, cruise line, cruise line contact information, cruise ships, contract information, itinerary, categories, cabins, and so forth. For more information on the cruise line information, please refer to the section above entitled "Cruise Line Database."

The cruise information add process 332 receives a set of cruise line data and formats the data for submission to the cruise line database 234. Next, the cruise information add process 332 submits the formatted data to the cruise line database 234. In one embodiment, the cruise information add process 332 may send a message to the user signifying whether the add was successful.

2. Cruise Search Process

In one embodiment, the cruise module 330 may include a cruise search process 334 that searches for information in the cruise line database 234.

The cruise search process 334 receives a set of search criteria. The search criteria may include information, such as, the cruise line identifier, cruise ship identifier, sailing dates, destination, home gateway, and so forth. The cruise search process 334 then formulates a query and sends the query to the cruise line database 234. Next, the cruise search process 334 receives the query results from the cruise database. If there are no items in the query results, the cruise search process 334 returns a "No Results Found That Match Your Query" message. If there are items in the query results, the cruise search process 334 organizes the query results or part of the query results into a data structure, such as, for example, a table or a list, and returns the query results. In one embodiment, a user may

then select the search result that matches the cruise information for which he is searching. If there is only one item in the query results, the cruise search process 334 may instead return a display of the corresponding data for the single search result, rather than a one item list of query results, thus permitting the user to bypass the selection of the item from the list.

3. Cruise Qualification Process

In one embodiment, the cruise module 330 includes a cruise qualification process 336 that permits the agent to qualify customers for cruise sailings in the cruise line database 234.

The cruise qualification process 336 receives a set of qualification criteria, such as, for example, booking history, preferred suppliers, number of passengers, currently preferred destination, price range, the desirable range of dates and duration of the cruise in which the customer is willing or able to participate, the desired destination or region of the world where the cruise will travel to as well as the home gateway from which the cruise ship will depart, and/or special conditions pertaining to the customer which might make him eligible for discounted rates or particular sailings. In one embodiment, the cruise qualification process 336 may also query the customer database 232 to include information that may be of interest for selecting cruises. For example, the cruise qualification process 336 may query the customer database 232 to determine whether the customer prefers high-end cruises or more economical cruises, whether the customer may qualify for a senior citizen discount, and so forth. The cruise qualification process 336 formats the criteria and sends a query to the cruise line database 234 with the criteria. The cruise qualification process 336 then receives a set of potential cruise line sailings from the cruise line database 234. If there are no items in the set of potential cruise line sailings, the cruise qualification process 336 returns a "No Results Found That Match Your Query" message. If there are items in the set of potential cruise line sailings, the cruise qualification process 336 organizes the set of potential cruise line sailings or a part of the potential cruise line sailings into a data structure, such as, for example, a table or a list, and returns the set of potential cruise line sailings. In one embodiment, a user may then select one or more potential cruise sailings that are of interest. If there is only one item in the set of potential cruise line sailings, the cruise qualification process 336 may instead return a display of the corresponding data for the single cruise line sailing, rather than a one item list of set of potential cruise line sailings, thus allowing the user to bypass the selection of the item from the list.

While the above described embodiment illustrates qualifying customers for cruise sailings, it is recognized that the customers may be qualified for other objects, such as, for example, cruise packages, on-shore excursions, advertisements, and so forth.

4. Cruise Comparison Process

In one embodiment, the cruise module 330 includes a cruise comparison process 338 that permits the agent to compare cruise package information in the cruise line database 234.

The cruise comparison process 338 receives a set of selected cruise sailings. In one embodiment, the cruise comparison process 338 then retrieves information related to the selected cruise sailings from the cruise line database 234. The cruise comparison process 338 returns a summary of information for the selected sailings. Next, the cruise comparison process 338 receives a selected sailing and retrieves the rate options that correspond to the selected sailing. The cruise comparison process 338 then formats and returns the rate options. After receiving a set of selected

rate options, the cruise comparison process 338 then searches the cruise sailing database for pricing information related to the set of selected rate options and formats the pricing information into a price matrix and returns the price matrix. In one embodiment, the cruise comparison process 338 may instead, or in addition to the above, query an external source for pricing information, such as, for example, a cruise line, a cruise line database 234, a cruise line clearing house system, and so forth.

In one embodiment, the cruise comparison process 338 may receive a request to view a different set of pricing information, such as for example, the best price matrix, the detailed price matrix, the air/sea matrix, and so forth. The cruise comparison process 338 then retrieves the requested pricing information for the selected matrix, process, and formats the data for display in one of the compare display windows. For example, if the best price matrix is requested, the cruise comparison process 338 may process the pricing data to select only the lowest prices for display in the pricing matrix. In other embodiments, the cruise comparison process 338 may already have the data stored, and thus a retrieval is not necessary.

The cruise comparison process 338 may also receive a compare display request wherein one of the categories in the price matrix has been selected for display in the compare display. The cruise comparison process 338 then retrieves additional pricing information for the selected category and formats the data for display in one of the compare display windows. In other embodiments, the cruise comparison process 338 may already have the data stored, and thus a retrieval is not necessary.

The cruse comparison process may then receive a different cruise sailing selection and repeat the above described process for the newly selected cruise sailing.

D. Booking Module Processes

In one embodiment, the cruise selling and booking system 110 may also include a booking module 340 that includes a collection of booking module 340 processes. The exemplary booking module 340 processes shown in Figure 3A include a cruise booking process 342 and a cruise payment process 344.

1. Cruise Booking Process

In one embodiment, the booking module 340 may also include a cruise booking process 342 that permits the agent to book cruises for his customers.

The cruise booking process 342 receives a set of booking or reservation information. The cruise booking process 342 may then format the information and send the information to the activity database 236. This information may include, for example, the cruise ship, the sailing, cabin number for which the customer will be traveling and so forth. In other embodiments, the cruise booking process 342 may format the information and send a booking request to the appropriate cruise line in a variety of formats, such as, for example, via facsimile, via an external query, via an external function call, and so forth. The cruise booking process 342 may then wait for a response from the cruise line. If cruise line responds that the requested cabin is not available, the cruise booking process 342 may return an error message stating "The Requested Cabin is No Longer Available." If the cruise line responds with a confirmation of the booking, the cruise booking process 342 may then return a confirmation and may then, in some embodiments, update the activity database 236.

2. Cruise Payment Process

In one embodiment, the booking module 340 may also include a cruise payment process 344 that permits the agent to submit payments for his customers.

The cruise payment process 344 receives a set of payment information. The cruise payment process 344 may then format the information and send the information to the cruise line database 234, the customer database 232, the activity database 236, and/or a payments database (not shown). This information may include, for example, vendor identification, amount due, credit card information, expiration date, name of cardholder, and so forth. In other embodiments, the cruise payment process 344 may format the information and send a payment notice to the appropriate vendor(s) (e.g., the cruise line, the off-shore excursion companies, the insurance companies, etc.) in a variety of formats, such as, for example, via facsimile, via an external query, via an external function call, and so forth. The cruise payment process 344 may then wait for a response from the vendor(s). If vendor responds that the payment was not accepted, the cruise payment process 344 may return an error message stating "Payment Unable to be Processed." If the vendor responds with a confirmation of the payment, the cruise payment process 344 may then return a confirmation/receipt and may then, in some embodiments, update the cruise line database 234, the customer database 232, the activity database 236, and/or the payment database. In other embodiments, the cruise payment process 344 may perform a credit check with a third party system (e.g., banking system, credit card system, etc.) to verify that the customer has the appropriate funds/credit limits to make the payment.

While various embodiments of the above processes have been disclosed, it is recognized that the processes may be implemented in a variety of manners that are well known to those skilled in the art.

VI. Agent Functions

In one embodiment, agents may be assigned to customers based in part on past activity, such as, for example, sending the customer a brochure, qualifying a customer, providing the customer with a quote, or booking a customer on a cruise. The relationship between the agent and the customer may then be used to track the agent's sales activity, determine the agent's commission, and so forth.

In one embodiment, agents may have additional access to part of the cruise selling and booking system 110. These functions may be used to assist the agent in pursuing and tracking customer leads and/or sales and help to increase the agent's likelihood of booking a customer on a cruise.

A first function matches available cruises with previously entered customer preferences. This function uses information stored in the customer database 232, the cruise line database 234, and/or the activity database 236, to determine which customers would be interested in a particular cruise based on the information included in the customer information and customer qualification fields. For example, if a customer had specified a desire to travel to the Bahamas during a certain time frame with a particular cruise line, but had not yet booked the cruise, an agent may perform searches based on this information and find matching cruises prior to contacting the customer. When one or more cruises have been identified by the agent as being desirable to the customer based on stored preferences and information, the agent may then contact the customer having the information readily available, increasing the likelihood the customer would book the cruise and improving the customer's experience with the cruise booking process 342 overall.

Further functions related to pursuing customer leads include routines designed to identify previous customers found in the customer database 232 and matching cruises to these customers based on their prior sailing experiences. This function automates portions of the marketing process and improves the agent's ability to gather return bookings from previous customers.

An additional function provides special offer matchings wherein the cruise selling and booking system 110 may search through the cruise line database 234 for special offers which do not apply to all customers and attempt to match cruises with customers in the customer database 232. Typically, such offers are based on specific restrictions such as age or state of residence and offer a reduced rate to individuals that meet the qualification restrictions. The automated matching features of the cruise selling and booking system 110 permit the agent to specifically target customers who meet the restricted requirements and to provide the agent with the customer's contact information so that the customer may be contacted directly.

The cruise selling and booking system 110 may also include report generation functions that allow agents to view reports based on, for example, their past activity, past commission, year to date sales, and so forth.

The above mentioned functions provide the agent with the necessary tools to better market available cruises to customers. The automated searching functions refine the process of matching customers with potentially desirable cruises and thus improve the likelihood that the customer will book a cruise with the agent. Furthermore, the search refinement reduces the amount of time the agent spends contacting customers who would not likely be interested in the particular cruise or are not qualified for the price which the cruise would be offered. Taken together, these functions improve agent booking success rates, minimize unnecessary customer interaction time, and improve a customer's experience with the cruise selling and booking process 310.

The additional functionality of greater agent access to the cruise selling and booking system 110 in one embodiment, advantageously provides the agent with the resources needed to effectively guide the customer through the cruise selection and booking process while at the same time maintaining agent ownership of the customer and maximizing the agent's commission. This information is organized in a manner so as to be easily accessible to the agent and to improve the speed and efficiently with which the agent sells cruise packages to the customers. The customer's experience in choosing a cruise is improved increasing the likelihood that the customer will book the cruise and in the future utilize the services of the same agent.

VII. Conclusion

While certain embodiments of the invention have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the present invention. For example, although described herein with reference to the Internet 125, the cruise selling and booking system 110 may be used in other types of interactive communication systems. Accordingly, the breadth and scope of the present invention should be defined only in accordance with the following claims and their equivalents.

SYSTEMS AND METHODS OF MATCHING CUSTOMER PREFERENCES WITH AVAILABLE OPTIONS

Systems and methods which represent various embodiments and example applications of the invention will now be described with reference to the drawings. Variations to the systems and methods which represent other embodiments will also be described. In one disclosed embodiment, the systems and methods are used to match a

customer's preferences with a variety of options and are described in the context of a cruise selling and booking system. The inventors contemplate that the present invention is not limited by the type of environment in which the determination of the customer's preferences is made, and that other types of environments may be used, such as, for example, a real estate system, an airline travel system, a car rental system, a car sales system, and so forth. The figures and descriptions, however, relate to embodiments of the invention wherein the determination is made for a customer or agent desiring to narrow a list of available cruise choices to those cruises which are most appropriate for the customer.

The present invention relates to a systems and methods for matching a customer's preferences with a variety of options for the purpose of facilitating the cruise booking process. More specifically, large quantities of cruise information, which may comprise information describing hundreds, if not thousands, of cruises from various cruise lines are processed to produce a refined subset of cruise information and is herein referred to as customer qualification.

Customer qualification provides the customer and/or agent with refined cruise information which better reflects cruises which will likely be of interest to the customer and reduces and/or excludes inappropriate or extraneous cruise information. Using the systems and methods described herein, a travel agent may better service customers in a more efficient manner, thereby reducing the time required to research appropriate cruise information, providing additional, detailed cruise information based on customer preferences, and creating a comprehensive summary relating to the available cruises. The customer benefits from the aforementioned systems and methods by the increased speed and ease of the cruise selling and booking transaction as well as the narrowing of the possible cruise choices to those that are likely to be most appropriate for the customer. In some instances, the cruise information refinement process results in the customer's ability to book a higher quality or more luxurious cruise which might have been otherwise overlooked using conventional methods of cruise selling and booking.

In one embodiment, these features are integrated into a cruise selling and booking system that automatically manages the administrative tasks used to determine the customer needs and preferences. Furthermore, the cruise selling and booking system includes searching and matching functionality to determine which cruises best meet with the criteria set forth by the customer preferences. Additionally, the cruise selling and booking system includes functions to provide a refined subset of available cruise information wherein the cruise information is directed towards the customer needs and preferences. It is recognized, however, that in other embodiments, the processes designed to determine customer needs may be integrated into other types of systems.

One benefit of one embodiment is that customer qualification facilitates the cruise selling and booking process wherein a customer may compare available cruise options and book a cruise based on detailed and up-to-date information. More specifically, customer qualification provides a flexible method to assess customer attributes and incorporate these attributes into a search query which returns a subset of results likely to be of interest to the customer. By breaking down the query into subsets of query information, important questions may be answered which may include, for example, how much the customer can afford, what kinds of activities the customer enjoys, the type of cruise which will satisfy the customer, and the level of luxury the customer desires. Furthermore, customer qualification helps to ensure that the travel agent is provided with sufficient information to find and present potential cruises that will suit the customer.

Another benefit of one embodiment is that customer qualification may serve as a preliminary screening aid to facilitate pricing comparisons. By removing cruises which do not meet a customer's needs, customer qualification narrows the choices presented to the customer so as to speed up the decision making process. The customer is presented with the best options from a large quantity of available cruises. In another aspect, by using the qualification process to funnel through the often large amounts of cruise information in a short period of time, both the travel agent and customer benefit by reducing the time spent assessing non-optimal cruise information and improving the booking experience of the customer.

An additional benefit of one embodiment is that the customer is able to find and book cruises in a more efficient manner saving the user time. The cruise selling and booking system provides a tool for readily accessing up-to-date, accurate cruise information without spending the large amount of time often required when telephoning the cruise lines one-by-one to collect cruise information and to book a cruise.

I. Overview

In one embodiment, the systems and methods may be used in the context of a cruise selling and booking system 110. Figure 1 illustrates the cruise selling and booking system 110 of one embodiment wherein a plurality of customers, agents, and cruise lines interact with the cruise selling and booking system 110 via communication mediums 120. Cruise lines may interact directly with the cruise selling and booking system 110 and/or via a cruise line interface system 130 that stores information for one or more cruise lines. The cruise selling and booking system 110, in the illustrated embodiment, provides an interactive tool for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. The customer is presented with information about various cruises packages and may book a cruise package utilizing the components of the cruise selling and booking system 110 through interaction with an agent.

In one embodiment, systems and methods for determining customer needs through customer qualification may commence with a customer interacting with an agent who has the expertise and resources to efficiently assist the customer through the cruise selling and booking process as illustrated in Figure 2A.

Using the agent computer 240, the agent accesses the components of the cruise selling and booking system 110 to find information about the customer, to provide the customer with information about cruise sailings from the cruise line database 234, and to book cruise packages as desired by the customer. Additionally, the agent may collect and store information about the customer in the customer database 232 and may further access resources of the agent database 238. In one embodiment, the agent database 238 stores information relating to the agents and their customers allowing the agents to better manage customer communication, scheduling, and interactions.

In one embodiment, a customer may also access the cruise selling and booking system 110 without necessarily interacting with an agent as illustrated in Figure 2B. For example, a customer may connect to the cruise selling and booking system 110 via a web based service by utilizing a standard web browser on his own computer to connect to the cruise selling and booking system 110 web page. In one embodiment, should the customer desire the assistance of an agent, the cruise selling and booking system 110 may store the information entered by the customer in the database collection 230. An agent with access to the cruise selling and booking system 110 may subsequently retrieve the information. This feature provides improved customer/agent interactivity by saving the customers from

repeating information previously stored in the cruise selling and booking system 110 to each agent with whom they interact. As it is recognized that both customers and agents may access the cruise selling and booking system 110, the term "users" will be used herein to refer to customers and/or agents.

In one embodiment, the qualification process is used to select a subset of cruise information from a large number of available cruise sailings and to reduce the complexity of information and choices typically associated with each cruise sailing. The refinement of cruise information is useful in that it narrows the number of cruise booking choices that are presented to the customer. Furthermore, the qualification process may improve the percentage of customers who book cruises and help ensure that customers are satisfied with their selection by knowing that their choice was made from a comprehensive set of cruise choices and options.

In one embodiment, the cruise selling and booking system 110 recognizes the refinement of cruise information through the customer qualification process. The cruise selling and booking system 110 may implement qualification through a series of steps which progressively refine the selection criteria for available cruises. Functionality for qualification using stored customer information in the cruise selling and booking system 110 and/or newly entered customer information provides flexibility in the manner in which the qualification process is performed. The customer information used in the qualification process may comprise customer preferences, personal information, and other information useful in narrowing the search criteria for acceptable cruises. Additionally, the cruise selling and booking system 110 may use the information gathered by customer qualification processes to identify cruises or packages with special eligibility requirements which might be otherwise overlooked or unknown by either the travel agent or the customer.

Customer qualification improves the efficiency with which the customer is serviced by providing a comprehensive search of available cruises and narrowing the number of cruises which must be compared. The narrowing process limits or eliminates cruises which do not match the criteria set by the customer information. Thus, the agent may quickly provide the customer with available cruise options which may be desirable to the customer. Another aspect of the customer qualification process ensures that the time spent by both the customer and the agent is focused on dealing with "viable" cruise selections rather than complicated by sorting through a large number of available cruises which may not be relevant or desirable to the customer.

II. Customer Qualification Module

In one embodiment, the cruise selling and booking component 220 includes a customer qualification module 360 ("qualification module 360") used to match a customer's preferences with a variety of cruise package options thereby narrowing the number of cruise packages that are presented to the user. One embodiment of a customer qualification module 360 includes a customer information acquisition process 1510, a pre-qualification process 1520, a qualification query process 1530, as well as additional processes 1540 as illustrated in Figure 15. For more information on the processes, please refer to the section below entitled "Customer Qualification Processes."

In one embodiment, the customer qualification module 360 is implemented using one or more of a variety of technologies such as, C++, VISUAL BASIC, JAVA, JAVA Script, Active Server Pages ("ASP"), Extensible Markup

Language ("XML"), as well as other scripting language that may be used to dynamically retrieve, generate, process, and/or format the data for a web document.

As used herein, the word module, whether in upper or lower case letters, refers to logic embodied in hardware or firmware, or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, C++. A software module may be compiled and linked into an executable program, or installed in a dynamic link library, or may be written in an interpretive language such as BASIC. It will be appreciated that software modules may be callable from other modules or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised of programmable units, such as programmable gate arrays or processors. The modules described herein are preferably implemented as software modules, but may be represented in hardware or firmware.

III. Customer Qualification Processes

In one embodiment, the customer qualification module 360 includes several processes such as a customer information acquisition process 1510, a pre-qualification process 1520, a qualification query process 1530, as well as additional processes 1540.

A. Customer Information Acquisition Process

Figure 16 illustrates one embodiment of the customer information acquisition process 1510 used during customer qualification to collect personal information from the customer. The collected information may then be used to narrow the number of cruises presented to the customer to those cruises which are most appropriate. Beginning at a start state (block 1600), the customer information acquisition process 1510 proceeds to the next state and receives a customer identifier (block 1605). In one embodiment, this state may require the input of a customer identifier such as a customer's name or customer ID to be used in subsequent steps in the process. A customer identifier may be submitted, for example, when the user logs onto the cruise selling and booking system 110. In the case of a customer login, the login name and password entered by the customer may be keyed to reference the actual name, ID, and customer information stored within the cruise selling and booking system 110. Proceeding to the next state (block 1610), the customer information acquisition process 1510 determines whether the supplied customer name or ID matches any records present in the customer database 232. If a customer database 232 match is found, the corresponding record with the customer profile is retrieved (block 1615). If the customer record does not exist, a new customer profile is created (block 1620) wherein the customer information acquisition process 1510 queries the user for information for at least a portion of the fields of the customer profile before proceeding to the next state. The information in the customer profile may include general information identifying the customer, such as, for example, name, age, address, contact information, gender, marital status, family members, group or organization affiliation, and the like. Upon successfully retrieving (block 1615) or creating (block 1620) a customer profile, the customer information acquisition process 1510 proceeds to an edit state (block 1625) where the customer profile may be presented to the user for viewing and/or editing. Upon completion of the customer profile edits, the profile may be stored in the customer database 232 (block 1630) and the customer information acquisition process 1510 awaits user

input (block 1635) indicating whether the user desires to proceed with a customer pre-qualification process 1520 (block 1640) or wishes to exit the customer information acquisition process 1510 (block 1645).

It is recognized that the customer information acquisition process 1510 may be implemented differently in other embodiments. For example, the customer information acquisition process 1510 may store the customer profile at any time during the creation or editing functions of the customer information acquisition process 1510 and/or the customer information acquisition process 1510 may skip the edit customer profile state.

B. Pre-Qualification Process

Figure 17 illustrates one embodiment of a pre-qualification process 1520. As illustrated in Figure 17, after the customer information has been collected, in one embodiment, the cruise selling and booking system 110 may proceed to a start state (block 1705). Upon entering this process, the pre-qualification process 1520 (block 1710) queries the user to determine whether the user would like to view a pre-qualification summary. If so indicated by the user, then the pre-qualification process 1520 retrieves the pre-qualification summary, sends the pre-qualification summary to the user (block 1715), and proceeds to the next state (block 1720). Should the user not wish to view the pre-qualification summary, the pre-qualification process 1520 proceeds to block 1720.

In one embodiment, the pre-qualification summary information includes information which may aid the user guiding the customer through the remainder of the pre-qualification process 1520. This information may include a summary of brochures and advertising sent to or encountered by the customer, customer travel history relating to previous cruises or other vacations booked or taken by the customer, and notes or reminders used to record items of interest which may be useful in distinguishing a particular customer or his travel habits.

Further functionality may be provided by the pre-qualification process 1520 to permit access to the stored customer information allowing additional information (which may be in the form of brochures, advertisements, or other information) to be automatically sent to the customer as requested. In one embodiment, the customer qualification module 360 updates the pre-qualification summary as needed to indicate the materials sent to the customer. In a like manner, the user may collect information regarding a customer's travel habits, history, or notes which may further be added to the existing pre-qualification summary as needed or desired.

In block 1720, the pre-qualification process 1520 queries the user for booking preferences which are used to further narrow the selection of cruise sailings. More specifically, the booking preferences may provide a number of criteria for establishing the specific type of cruise the customer would like to book. The information collected may include, for example, desired occupancy per cabin, range of desired travel dates, the preferred region of the world, specific destination, trip duration, acceptable days of the week upon which the cruise may depart, the embarkation port or point of origin of the cruise, specific cruise package suppliers, and/or specific ships. In another embodiment, the booking preferences are used to restrict the cruise preferences to exclude cruise sailings which include undesirable cruise options. For example, a particular cruise line or cruise ship may be specifically excluded from the qualification results.

After collecting the booking preferences of the customer, the pre-qualification process 1520 proceeds to the next state wherein additional search criteria may be obtained (block 1725) from the user to further narrow the search. The search criteria may include other factors which aid in the cruise selection process including indications of the

degree of flexibility the customer has with regard to the type, time, or destination of the cruise; special restrictions which might apply to the desired cruise including handicaps or food requests; special discounts or eligibility requirements for which the customer may be entitled, such as, for example, participation in various organizations, membership in particular societies, or residency in certain states; as well as other criteria that may be used by the cruise lines when booking particular cruise sailings.

After the search criteria has been received, the pre-qualification process 1520 awaits for user input (block 1730) indicating whether the user desires to proceed with a customer qualification query process 1530 (block 1735) or wishes to exit the qualification process (block 1740).

It is recognized that the pre-qualification process 1520 may be implemented differently in other embodiments. For example, the pre-qualification process 1520 may store information obtained during any step of the process in the customer database 232 and may further retrieve this information at any time to resume at the point where the user left off.

C. Qualification Query Process

Figure 18 illustrates one embodiment of a qualification query process 1530 for identifying cruise sailings of interest. As illustrated in Figure 18, after the pre-qualification process 1520 has been completed, in one embodiment, the cruise selling and booking system 110 proceeds to a start state (block 1800). Proceeding to the next state, the qualification query process 1530 retrieves the information received in the customer information acquisition process 1510 and the pre-qualification process 1520 to prepare a qualification query (block 1810). The qualification query process 1530 may then prepare and process the qualification query (block 1820) such that the qualification query acts as a filter to select cruises from the cruise line database 234 which may be of potential interest to the customer.

In one embodiment, the cruise selling and booking system 110 uses the information obtained from the cruise line database 234 to identify cruises which meet the restrictions included in the qualification query information. Additionally, the qualification query process 1530 may retrieve cruise information from other cruise booking systems and databases. For example, in addition to using the locally maintained cruise information stored in the database collection 230, the qualification query process 1530 may connect with a plurality of external databases, cruise lines, and/or travel agencies to acquire additional cruise information so as to create a more comprehensive query.

Upon collecting the cruise data, the qualification query process 1530 retrieves matching cruise packages by applying the query criteria to obtain a subset of cruises (block 1830). In one embodiment, the qualification query process 1530 sorts the cruises using a variety of methods, such as, for example, by order of relevance, alphabetically, by price, and so forth. The results are then sent to the user (block 1840) for display in an organized manner so as to limit the cruise choices to those cruises found to be most likely to meet the customer's specifications, and the qualification query process 1530 proceeds to an end state (block 1850).

In one embodiment, the qualification query results are formatted in a list summarizing the available cruise choices which are the most appropriate matches based on the customer's information and preferences. The summary list may include information regarding the cruise line, cruise ship, sail date, duration, cruise itinerary or description, and pricing range. The summary list provides an easy-to-visualize reference from which a user may compare individual cruise sailings. Additionally, each item in the summary list may be linked to extended information regarding particular

aspects, features, or descriptions which when invoked, provide more in-depth information about the summary list item. Thus, the user is able to readily search through thousands of cruise packages and quickly obtain a comprehensive, yet consolidated, subset of cruise selections facilitating the customer cruise selection and booking process.

It is recognized that other embodiments of the qualification query process 1530 may be used. For example, in one embodiment, the user may retrieve additional results from the current query and refine the search to include alternative query information without having to re-enter the query in its entirety. Further, in other embodiments, only a local database may be searched or only an external database may be searched.

Upon completion of the qualification query process 1530, the qualification query results may be selected and compared using other features and functionalities of the cruise selling and booking system 110. The design of the cruise selling and booking system 110, therefore, may use the information from the qualification query process 1530 with other components or modules of the cruise selling and booking system 110.

D. Additional Processes

The customer qualification module 360 may also include additional processes 1540. In one embodiment, the customer qualification module 360 may include a summary list item process for retrieving and returning additional detailed information on a summary item. For example, a summary list item for a cruise ship may be linked to an image or map of the actual decks of the cruise ship for display to the user. This display provides detailed information about a potential cruise sailing. Likewise, a summary list item for an itinerary of a cruise sailing may provide a detailed listing of activities, events, and stopovers which are scheduled for a particular cruise sailing. Linking the summary list items to more detailed information enables the user to quickly access additional information about the qualified cruise sailings which may aid customers in making a decision as to which cruise best suits them.

The customer qualification module 360 may also include a price breakdown process which displays a breakdown of the pricing information for use by the travel agent when negotiating a booking price with the customer. The price breakdown process provides the travel agent with a tool to compare prices among the various cruises. The price breakdown process may be advantageously used by the travel agent to negotiate booking prices with the customer allowing the travel agent to present the customer with pricing choices for various quality and luxury options on the cruise sailings while at the same time maximizing the travel agent's commission. Additionally, the price breakdown process may indicate to the travel agent the lowest allowable prices for which a cruise may be booked.

In addition, the customer qualification module 360 may include an availability check process that displays the current availability of cabins or rooms on selected cruise ships. Using this information, the user may verify the availability of particular rooms or cabins which may be held, reserved, and/or booked. The availability check process may also assist the user in determining how full a cruise sailing remains and provide the user with an indication of the relative urgency of the customer's booking. For example, if a user knows that the cabins for which the customer is interested are only 25% booked, the urgency is low; whereas if the cabins are 98% booked, the user may urge the customer to book or at least hold a cabin.

IV. Qualification Display

Figure 7 illustrates one embodiment of qualification display web page 710 or customer preference display with a preferences section 720. In the exemplary qualification display 710, the preferences section 720 includes

number of persons per cabin 721, dates of travel 722, home gateway 723, number of nights of travel 724, day of embarkation 725, and port of embarkation 726. In addition, the preferences section 720 enables the user to view a set of travel regions 727, itineraries 728, suppliers 729, ships 730, and/or ports 731. In addition, the user may search by supplier contract number 732. In one embodiment, the cruise selling and booking system 110 may generate such information from the database collection 230, however, it is recognized that in other embodiments, the information may be entered in whole or in part as separate data or not included at all.

In the exemplary qualification display 710, the user has restricted the search to cruises allowing two persons per cabin, sailing from October 8, 1999 to October 2, 1999 for seven nights, and departing on any day of the week.

When the agent has entered the appropriate information listed above, the agent computer 240 submits the customer's sailing preferences to the cruise selling and booking system 110. The customer qualification module 360 receives the information and searches for cruise sailings in the cruise line database 234 that fall within the range of the submitted criteria.

If no matching cruise sailings are found, the customer qualification module 360 may inform the agent computer 240 that no sailings were found or may return a set of "suggested" cruise sailings that do not meet the criteria but still may be of interest to the customer. Such "suggested" cruise sailings may be selected on the basis of several factors. For example, the customer qualification module 360 may suggest cruises sailings that depart on dates before or after those specified by the customer, cruise sailings that provide special discounts for attributes that match the customer's profile (e.g., children cruise free), cruise sailings that match preferences that the customer has previously requested, as well many other cruise sailings.

If matching cruise sailings are found, the customer qualification module 360 sends a set of matching cruise sailings to the user. As described above, the customer qualification module 360 may also include a set of suggested cruise sailings with the matching cruise sailings. Figure 7 illustrates an exemplary set of cruise sailing search results that enables the user to view and select number of cruise sailings by marking the "check box" 742 that corresponds to the selected cruise package. An exemplary cruise sailings search results section 740 is shown in Figure 7 wherein the first cruise package is the Carnival Tropicale ship scheduled to depart on September 8, 2001 for a seven day cruise to the Western Caribbean. The user has selected the Carnival Tropicale, the Princess Dawn Princess, and the Royal Caribbean Explorer of the Seas.

It is recognized that Figure 7 illustrates one embodiment of a set of cruise sailing search results and that in other embodiments, other sets of cruise sailing search results may be used. For example, in another embodiment, the set of cruise sailing search results may include information about pricing, such as Block pricing and/or FIT pricing information, as well time stamp information indicating when the information was last updated by time and date.

In one embodiment, the customer qualification module 360 may also include guidelines for ranking the order in which the cruise sailings are displayed and/or provide separate designations for "matching" and "suggested" cruise sailings, such as, for example, by availability, by departure date, by average cost, and so forth.

V. Conclusion

While certain embodiments of the invention have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the present invention. Accordingly, the breadth and scope of the present invention should be defined in accordance with the following claims and their equivalents.

DETAILED DESCRIPTION OF SYSTEMS AND METHODS OF DISPLAYING CRUISE LINE PRICING DATA

Systems and methods which represent various embodiments and example applications of the invention will now be described with reference to the drawings. Variations to the systems and methods which represent other embodiments will also be described. In one disclosed embodiment, the systems and methods are used to provide pricing information and is described in the context of a cruise selling and booking system. The inventors contemplate that the present invention is not limited by the type of environment in which the pricing information is provided and that other types of environments may be used, such as, for example, a real estate system, an airline travel system, a car rental system, a car sales system, as well as any other type of system that sells and/or provides pricing information about various products and/or services. The figures and descriptions, however, relate to embodiments of the invention wherein the pricing information relates to cruise packages.

The present invention relates to systems and method for comparing multiple sets of pricing information. One embodiment of the invention includes a system for displaying subsets of pricing information in table format wherein the pricing information may be readily compared with other sets of data.

One benefit of one embodiment is that users may select among a variety of pricing options permitting users to narrow the range of pricing information which is displayed. In some instances, a particular customer may not qualify for certain pricing options and thus, such options may be excluded from the pricing display.

Another benefit of one embodiment is that users are presented with a price matrix of relevant pricing data. The users may select pricing options for which the customer may qualify and are presented with corresponding pricing information for the selected pricing options in a discrete price matrix. The price matrix displays two or more sets of pricing data enabling the users to compare the details of the pricing data. An additional benefit of one embodiment it that the users may view various types of price matrices depending on the individual customer and/or the amount of data.

A further benefit of one embodiment is that as the pricing options, prices, and availability change, the changes are reflected in the user's displays. The user is presented with up-to-date, current information.

An additional benefit of one embodiment is that the customer is able to find and book cruises in a more efficient manner saving the travel agent and/or the customer time. The cruise selling and booking system provides a tool for readily accessing up-to-date, accurate cruise information without spending the large amount of time often required when telephoning the cruise lines one-by-one to collect cruise information and to book a cruise.

In one embodiment, these features are integrated into a cruise selling and booking system that assists agents and customers with finding cruises that meet the customers' preferences. Furthermore, the cruise selling and booking system facilitates the ability of the customers and agents to compare accurately the various cruise pricing data.

I. Overview

In one embodiment, the systems and methods may be used in the context of a cruise selling and booking system 110. Figure 1 illustrates the cruise selling and booking system 110 of one embodiment wherein a plurality of customers, agents, and cruise lines interact with a cruise selling and booking system 110 via communication mediums 120 such as the Internet 125. Cruise lines may interact directly with the cruise selling and booking system 110 and/or via a cruise line interface system 130 that stores information for one or more cruise lines. The cruise selling and booking system 110, in the illustrated embodiment, provides an interactive tool for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. The customer is provided with information about various cruises packages and may book a cruise package utilizing components of the cruise selling and booking system 110 through interaction with an agent.

Using the agent computer 240, as illustrated in Figure 2A, the agent accesses the components of the cruise selling and booking system 110 to find information about the customer, to provide the customer with information about cruise sailings from the cruise line database 234, and to book cruise packages as desired by the customer. Additionally, the agent may select various pricing options for which the customer qualifies and then view the cruise pricing information that corresponds to the selected pricing options using one or more of the price matrices.

In one embodiment, a customer may also access the cruise selling and booking system 110 without necessarily interacting with an agent as illustrated in Figure 2B. For example, a customer may access the cruise selling and booking system 110 via a web based service by utilizing a standard web browser on his own computer to connect to the cruise selling and booking system 110 web page. In one embodiment, should the customer desire the assistance of an agent, the cruise selling and booking system 110 may store the information entered by the customer in the database collection 230. An agent with access to the cruise selling and booking system 110 may subsequently retrieve the information. This feature provides improved customer/agent interactivity by saving the customers from repeating information which was previously stored in the cruise selling and booking system 110 to each agent with whom they interact. As it is recognized that both customers and agents may access the cruise selling booking system, the term "users" will be used herein to refer to customers and/or agents.

In one embodiment, a system and method of comparing pricing information may commence with a user accessing the cruise selling and booking system 110 to search for cruise packages that meet a customer's preferences. The user may utilize the cruise selling and booking system 110 to select a set of pricing options for which the customer may qualify. The user may then view detailed pricing information that corresponds to the set of pricing options in one or more of the available price matrices.

Pricing options, also referred to as rate options, are the representative pricing categories that a user may select for the customer. These pricing options may include discounts associated with package deals for air and extended stay vacations as well as other incentive packages that a customer may select prior to booking. Other examples include local resident discounts, senior discounts, child traveling rates, weekend getaway rates, group rates, and so forth. Each cruise line has a variety of pricing options that set the prices for the multiple categories of cabins of the various cruise sailings and cruise ships. Travel agents use the pricing options along with other pricing information to find the best rate for the customers while at the same time maximizing their own commission. Due to the large number of possible pricing options for each of the multiple cabin categories, it is often useful for the agent to limit the

pricing information of each sailing to a smaller subset of information based on the customer's profile and preferences. In one embodiment, the number of pricing options that may be selected may be restricted (e.g. to four or five). In another embodiment, the pricing options presented to the user may reflect current availability of the cabins and/or cabin categories such that if a pricing option has expired or has been used up, the pricing option is not presented to a user.

Price matrices, also referred to as cruise detail displays, display information for the categories of each cruise sailing allowing the user to select individual categories as well as limit the display to selected categories by filtering out excess information. The price matrices display prices for the available cabin categories of the designated sailings and the selected pricing options. The information may include real-time data such that as the prices are changing, the prices presented to the user reflect the changes.

In one embodiment, the price matrices may be adjusted, by reducing the number of viewed items and/or displaying additional detailed information regarding a specific sailing. Furthermore, in one embodiment, the price matrices include features that give the user access to more detailed information about the categories or the sailings. This information may include, for example, locations of cabins, lounges, and entertainment on any selected ship. In one embodiment, the user may switch between a variety of price matrices such as, for example, a price matrix with the "best price" information, a price matrix with detailed information, a price matrix with airfare information, and so forth.

II. Price Comparison Module

In one embodiment, the cruise selling and booking system 110 includes a price comparison module 370 used to present the user with available pricing options and to provide price matrices of real-time, detailed pricing and availability information.

Figure 19 illustrates one embodiment of a price comparison module 370 which includes a pricing options selection process 1910 and a price matrix process 1920. For more information on the price comparison processes, please refer to the section below entitled "Price Comparison Processes." In one embodiment the price comparison module 370 may be implemented as part of the cruise selling and booking component 220 and may interact with the server component 210 and the database collection 230.

In one embodiment, the price comparison module 370 may utilize several resources to find available pricing options as well as pricing information. For example, the price comparison module 370 may query the database collection 230 for customer information stored in the customer database 232, such as, for example, number of passenger, age of passengers, home gateway city, past destinations, credit approval, and so forth. The customer information may be used to qualify each customer for various steps in the process of purchasing a cruise. In addition, the price comparison module 370 may also query the database collection 230 for cruise line information stored in the cruise line database 234, such as, detailed information about the cruise lines, the cruise ships, as well as category information and pricing information. The price comparison module 370 may also query outside sources, such as, for example external databases, cruise lines, travel agencies, and so forth. For example, the price comparison module 370 may query a cruise line to determine which pricing options are currently available for the selected sailing. In one embodiment, the price comparison module 370 may query another source to obtain real-time pricing and availability data as well as the database collection 230 for static data and use both sets of data to present the user with rate options and/or price matrices. For example, the price comparison module 370 may query a cruise line or a cruise line

interface system 130 to determine whether there are any available cabins for the selected sailing and to request real-time pricing information for the cabins.

In one embodiment, the database collection 230 may be stored locally and content may be updated to a remote server on a periodic basis. In other embodiments, the information entered by the user may be transferred across a communication medium to a centralized database. The database collection 230 may be accessed by certain function calls enabling the agent to gather information through a standard web interface. The database calls may be standardized to permit web page requests to remotely access cruise provider databases without errors.

In one embodiment, the price comparison module 370 is implemented to provide the user with a selection of pricing options and a matrix of pricing information. In one embodiment, the price matrix displays various pricing information for the categories of cabins that are available on the selected cruise ship sailing. The price comparison module 370 may be implemented using one or more of a variety of technologies such as, C++, VISUAL BASIC, JAVA, JAVA Script, Active Server Pages ("ASP"), Extensible Markup Language ("XML"), as well as other scripting languages that may be used to dynamically retrieve, generate, process, and/or format the data for a web document.

As used herein, the word module refers to logic embodied in hardware or firmware, or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, C++. A software module may be compiled and linked into an executable program, or installed in a dynamic link library, or may be written in an interpretive language such as BASIC. It will be appreciated that software modules may be callable from other modules or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised of programmable units, such as programmable gate arrays or processors. The modules described herein are preferably implemented as software modules, but may be represented in hardware or firmware.

III. Price Comparison Displays

Figures 9, 10, 20, and 21 illustrate embodiments of price comparison displays that includes a cruise detail web page 810 with a "Select A Cruise" section 820 and a "Cruise Detail" section 830. Figure 9 illustrates a pricing options display. Figure 20 illustrates a compare display for which two cruise packages have been selected.

A. Pricing Options Display

One embodiment of a pricing options display 910 is illustrated in Figure 9 wherein the user has selected to view a set of available pricing options for the Princes Dawn Princess cruise sailing which departs on September 8, 2001. The exemplary display 910 includes a title bar 911 designating the cruise line, the cruise ship, the departure date, as well as a tag ("07SC3") that corresponds to the call that was assigned to the database search. The exemplary display 910 uses a table format to display the pricing options with heading descriptions at the top of the table such that each row includes information that corresponds to an individual pricing option. The exemplary headings are identified as "Rate Code" 912, "Rate Name" 914, "Start Date" 916, "End Date" 916, and "Status" 918.

The rate codes 912 identify various pricing options for the cruise sailing and in one embodiment may be presented based upon their availability. For example, once a pricing option has expired or has been exhausted, the pricing option may not appear in the display. The rate code 912 may be determined by the cruise selling and booking

system 110, the cruise lines, the travel agents, and/or a combination of the above. The rate names 914 designate the name of the pricing option and may provide additional information about each option such as for example, whether the code may be used in conjunction with air fare or whether it only applies to cruises. The start dates 916 and end dates 916 represent times for which the pricing options are available signifying when the promotion ends and/or how long the specific option has been in existence. The status 918 signifies whether a pricing option has expired. In one embodiment, if the pricing option is available, the status 918 is OPEN, whereas if the pricing option has expired, the status 918 is marked as CLOSED. In one embodiment, the pricing options display 910 filters out pricing options that are of the CLOSED status.

In one embodiment, the pricing option display 910 may also include an expandable field 922 for displaying additional information including rules that may apply for a specific rate code. This information may be displayed or hidden underneath the rate code by clicking on the right arrow 924, which becomes a down arrow to represent the expanded field. The user may also select the checkbox 926 located to the left of each rate code to include the pricing option in a price matrix. The pricing option display 910 may also include an input field 920 at the top of the display enabling an agent to enter manually a known rate code. Manual entry may be useful in situations where a user is working with a special promotion that may not be part of the system, a new promotion that has not yet been added to the system, and/or common promotions with which the user is familiar.

For example, rate code BNPTPXUSD represents the best available past passenger rate that does not include air prices. The BNPTPXUSD option was available beginning on October 12, 1998 and ends on March 28, 2001. The expanded field 922 includes information about BNPTPXUSD stating that the passenger must have booked a cruise within the last two years to qualify for this rate code 912. Furthermore, the checkmark in the checkbox 926 indicates that the rate code 912 has been selected as a pricing option for the price matrix.

It is recognized that in other embodiments, the pricing options display 910 may include different sets of data and/or some of the data may be excluded from the display. For example, in one embodiment, the user may not be presented with the input field 920. Furthermore, in other embodiments, the pricing options display 910 may limit the number of pricing options that a user may select to a predetermined number, such as, for example, three or four.

B. Price Matrix Display

One embodiment of a price matrix display 2010 is illustrated in Figure 20 wherein the user has selected the Princes Dawn Princess cruise sailing which departs on September 9, 2001. The exemplary price matrix display 2010 includes a price matrix section 2020 and a button section 2030.

1. Price Matrix Section

The exemplary price matrix section 2020 displays the real-time pricing information for the selected pricing options and, in one embodiment, may include pricing information for pricing options that are always included, such as, for example, a promotional price, best TRAVL price, best price, and so forth. The price matrix displays the pricing information in table format with heading descriptions at the top of the table such that each row includes information that corresponds to an individual pricing category. The exemplary headings are identified as "Cat" 2021, "Type" 2022, "GG/Promo" 2023, "TRAVL Block" 2024, "BF" 2025, and so forth.

The "Cat" column 2021 represents the category code for the description of the accommodations. The category code may be determined by the cruise selling and booking system 110, the cruise lines, the travel agents, and/or a combination of the above. Furthermore, the category codes may be different for various cruise lines and may vary in presentation. The "Type" column 2022 represents the type of category, such as, for example, suite, single room, double room, outside cabin, inside cabin, and so forth. The next columns 2023, 2024, 2025 represent the various pricing or rate options. In one embodiment, each pricing or rate option column 2023, 2024, 2025 may be further segmented into sub-columns to present the costs for double occupancy, single occupancy, shared occupancy, third person of a triple occupancy, fourth person for a quadruple occupancy, as well as other information, such as availability, options, and/or upgrades. The upgrade column may be populated if an upgrade is available either by special promotion or as an opportunity for an upgrade based on group rates.

In the exemplary price matrix, the BB/Promo price 2023 includes the port charges and displays a promotional rate price. The "TRAVL Block" 2024 displays prices that the travel agency may offer. In some instances, a travel agency or group may purchase or hold a block of cabins at a discounted price and may pass the discount onto the customers. The "BF" price 2025 is the best price which may be retrieved from the system and/or calculated in real time by taking the lowest price of all of the available pricing options or one or more subsets of the available pricing options. Pricing information for other selected pricing options may also be displayed.

The exemplary cruise ship, the Princess Dawn Princess includes several categories, 12, 6D, 6C, 6B, 6A, 5A, and so forth. In one embodiment, the categories are sorted from most expensive to least expensive, though in other embodiments, other sorting methods may be used. In addition, if pricing information is not available, or if there is no availability for a particular category, the price matrix may display "N/A," designating not applicable. In other embodiments, the category may be removed from the price matrix, and/or the availability of a particular category may be checked at a later time.

In one embodiment, the price matrix section 2020 includes a column of checkboxes 2026 located to the left of each "Cat" column. The checkboxes 2026 enable the user to select from the set of categories a subset of categories to view in a "Show Selected" matrix discussed below. Furthermore, the price matrix section 2020 includes a column of arrows 2027 next to the checkboxes that enable the user to open a window that will display the details regarding the category such as detailed descriptions of the categories and the associated amenities. For example, for category 12, the additional information may state that 12 is a suite on the promenade deck. Such information may be useful as many cruise lines use their own set of categories. The price matrix also includes a column of arrows 2028 within each

pricing option column that enables the user to display the selected the pricing option and category in the compare display.

2. Button Section

In one embodiment, the price matrix may also include a button section 2030 that enables a user to revise and/or refine the pricing information. For example, the price matrix defaults to providing information for cabins based on a two person per cabin booking. By submitting a different number and selecting the "Modify Pax" button 2031, the user may request pricing information for other numbers of persons per cabin.

The "Show Selected" button 2032 works in conjunction with the check boxes located to the left of the price matrix rows. The user may select one or more of the categories for display and then select the "Show Selected" button to limit the price matrix to only the selected categories in a "Show Selected" matrix. The "Show Selected" button then changes to a "Show All" so that the user may return to the set of all categories. In one embodiment, the default view includes all of the categories for the selected cruise sailing, though it is recognized that other defaults may be used.

The "Best Price" button 2033 permits the user to view a Best Price matrix wherein the best prices are displayed in a matrix. Furthermore, the "Air/Sea" button 2034 permits the user to view an Air/Sea price matrix detailing price information that includes airfare. If the "Best Price" button is selected, the "Best Price" button then changes to a "Detail" button enabling the user to return to the price matrix. Furthermore, if the "Air/Sea" button 2034 is selected, the "Air/Sea" button 2034 then changes to the "Detail" button enabling the user to return to the price matrix. For more information on the "Best Price" matrix, please refer to the section below entitled "Best Price" matrix. For more information on the "Air/Sea" price matrix, please refer to the section below entitled "Air/Sea Price Matrix."

The "Deck" button 2035 displays a pop-up window illustrating the cruise ship's key locations as well as the specific locations of cabins on every level of the ship. To close the window, the user may select the "Close" button. In one embodiment, the "Deck" button is inactive if the cruise ship's information is not available.

The "Rate Options" button 2036 returns to the pricing options display 820 discussed above. These buttons enable the user to switch between a variety of price matrices permitting accurate comparisons of pricing information.

In one embodiment, the user may select another cruise to view pricing information on a different cruise sailing.

C. Best Price Matrix

The Best Price matrix 1010 displays a subset of the available pricing information wherein only the "best prices" are presented for various categories as illustrated in Figure 10. Similar to the price matrix display 2010, the Best Price matrix 1010 includes a "Cat" column 1011, and "Upg" column 1012, and a "Type" column 1013. In addition, the Best Price matrix 1010 includes columns representing the best price for various sets of options. For example, in Figure 10, the best prices for the Promotion rate 1014, the full individual tariff ("FIT") price 1015, and the best TRAVL price 1016 are displayed. In one embodiment, the FIT price represents the best price for the selected rate options and pricing categories wherein the price comparison module 370 finds the prices for the selected rate options for the categories, determines the best prices, and displays the best price. The Best Price matrix may also include a best price description column 1017 which presents the user with information on the pricing option that was used to find the best prices.

In one embodiment, the best prices are by default based upon double occupancy, though the user may change the number of persons per cabin. Furthermore, in other embodiments, other default values may be used. In one embodiment, the Promotion column 1014 may be populated with pricing information if there is a special theme cruise that has been planned or if there is any other promotion offered by the cruise lines. The FIT price 1015 represents the best price for the selected rate options and pricing categories. The Best TRVL price 1016 represents the best price an agent can offer which may be affected by negotiated deals between agencies and cruise line carriers. In many cases, it is beneficial for the agent to see the multiple pricing options as to afford the customer an upgraded room category at a lesser price while at the same time maximizing commission. The last category 1017 identifies the description of the best price.

In one embodiment, the Best Price matrix 1010 may be presented to the user as the default view as it provides the user with a concise summary of the best prices that may be offered to the user. In other embodiments, however, other price matrices may be used as the default. For example, if the travel agency has an agreement with an airline, the Air/Sea price matrix may be used as the default to help encourage airfare sales.

For a discussion of the buttons used with the Best Price matrix 1010 see the section above entitled "Price Matrix Display – Button Section."

D. Air/Sea Price Matrix

The "Air/Sea" price matrix 2110 displays pricing information that includes airfare from a gateway city as illustrated in Figure 21. During the cruise selling and booking process 310, the user may select a gateway city 2111 from which the customer will depart. In one embodiment, the gateway city 2111 represents the starting point for airline transportation rather than the port of departure. The user may then have the option of manually requesting price quotes for airline travel, using the cruise selling and booking system 110 to search for airfare information, or using another system to find airline itineraries and prices that suit the customer's needs.

IV. Price Comparison Processes

In one embodiment, the price comparison module 370 includes a pricing options selection process 1910 and a price matrix process 1920.

A. Pricing Options Selection Process

An overview of one embodiment of a pricing options selection process 1910 is shown in Figure 22. Beginning at a start state (block 2210), the pricing options selection process 1910 transitions to the next state (block 2220) and receives a selected sailing. The pricing options selection process 1910 then retrieves a set of pricing options that correspond to the selected sailing (block 2230). The set of pricing options may be retrieved from an internal source and/or an external source. In addition, the set of pricing options may be based in part on cabin and/or pricing option availability. Next, the pricing options selection process 1910 formats the set of pricing options and returns them to the user (block 2240). The pricing options selection process 1910 then receives a set of selected pricing options, wherein the selected pricing options is a subset of the set of pricing options (block 2250) and proceeds to an end state (block 2260).

It is recognized that other embodiments of a pricing options selection process 1910 may be implemented. For example, the pricing options may be retrieved for each selected sailing after all sailings have been selected.

B. Price Matrix Process

An overview of one embodiment of a price matrix process 1920 is shown in Figure 23. Beginning at a start state (block 2310), the price matrix process 1920 transitions to the next state (block 2320) and receives a selected sailing and a set of selected pricing options. In one embodiment, the price matrix process 1920 may receive the selected sailing and/or the set of selected pricing options from the pricing options selection process 1910. Next, the price matrix process 1920 retrieves pricing information for the selected sailing (block 2330) and filters information to the pricing information that corresponds to the set of selected pricing options (block 2340). The pricing information may be retrieved from an internal source and/or an external source. In addition, the pricing information may include real-time pricing and availability data. The price matrix process 1920 formats the pricing information and sends it to the user (block 2350) proceeding to an end state (block 2360).

It is recognized that other embodiments of a price matrix process 1920 may be implemented. For example, the price matrix process 1920 may also filter the pricing information to include only the best prices for a set of categories. The set of categories may be retrieved from the database collection 230 and/or may be received from the user. Furthermore, the price matrix process 1920 may also add in airfare information and/or remove airfare information depending on how the pricing information is stored.

V. Accessing the Pricing Options and the Price Matrices

In one embodiment the user may access the pricing options and the price matrices throughout the cruise selling and booking process 310. Furthermore, in other embodiments, a user may access directly the pricing options and/or the price matrices using the price comparison module 370.

A. Accessing the Pricing Options

In one embodiment, user may access the pricing options display after selecting specific cruise sailings from the cruise line carriers. When the user selects a cruise sailing, the price comparison module 370 receives the user's selection and determines whether there are any pricing options available. This may include, for example, querying a cruise line or a cruise line interface system 130 to determine the availability of particular cabins and/or pricing options. In one embodiment, the price comparison module 370 searches for any pricing options, while in other embodiments, the price comparison module 370 may retrieve only those pricing options for which the user is qualified. In other embodiments, the price comparison module 370 excludes pricing options for which the user does not qualify. If there no available pricing options, then the user may be presented with a price matrix. Otherwise, if there are available pricing options, the pricing options display may be presented to the user.

If there are available pricing options, the user may, in one embodiment, select up to four pricing options for display in a price matrix. These options may include, for example, best possible fare "BF," resident pricing discount "PGR," and/or a senior pricing "PGSR1."

B. Accessing the Price Matrices

In one embodiment, the user may access the price matrices throughout the cruise selling and booking system 110. For example, the user may select pricing options in the pricing options display and select the continue button to view a price matrix that corresponds to the selected pricing options. In addition, the user may select the previously selected sailing thereby bypassing the pricing options display and directly viewing a price matrix. Furthermore, within

the Option Recap screen, the user may select the "Category Sailed" button. This selection will initiate a price matrix in the place of the Option Recap screen and allow the user to include a new category in the specific sailing.

VI. Conclusion

While certain embodiments of the invention have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the present invention. Accordingly, the breadth and scope of the present invention should be defined in accordance with the following claims and their equivalents.

DETAILED DESCRIPTION OF SYSTEMS AND METHODS OF COMPARING PRODUCT INFORMATION

Systems and methods which represent various embodiments and example applications of the invention will now be described with reference to the drawings. Variations to the systems and methods which represent other embodiments will also be described. In one disclosed embodiment, the systems and methods are used to compare product information and are described in the context of a cruise selling and booking system. The inventors contemplate that the present invention is not limited by the type of environment in which the product information is compared and that other types of environments may be used, such as, for example, a real estate system, an airline travel system, a car rental system, a car sales system, as well as any other type of system that sells and/or provides information about various products and/or services. The figures and descriptions, however, relate to embodiments of the invention wherein the product information is cruise package and pricing information.

The present invention relates to systems and methods for comparing multiple sets of information in a compare display. One embodiment of the invention includes a system for displaying cruise package and pricing information in side-by-side windows wherein the user may replace the contents of each of the windows with an alternate selection of cruise package and pricing information. The compare display enables the users to compare accurately the detailed cruise package and pricing information.

One benefit of one embodiment is that users may select among a variety of cruise package options permitting the user to view a myriad of available cruise package and pricing information. A user may display information from different cruise lines, cabin categories, rate options, and so forth.

Another benefit of one embodiment is that users may compare detailed information about the cruise package and pricing information in the compare display such that as the user scrolls through the information of one set of cruise package and pricing information, the corresponding information of the other cruise packages is also displayed.

An additional benefit of one embodiment it that the user may replace one cruise package with another allowing for the comparison of even more cruise packages.

An further benefit of one embodiment is that the user is able to find and book cruises in a more efficient manner saving time. The cruise selling and booking system provides a tool for readily accessing up-to-date, accurate cruise information without spending the large amount of time often required when telephoning the cruise lines one-by-one to collect cruise information and to book a cruise.

In one embodiment, these features are integrated into a cruise selling and booking system that assists agents and customers with finding cruises that meet the customers' preferences. Furthermore, the cruise selling and booking system 110 facilitates the ability of the customers and agents to compare accurately the various cruise packages.

I. Overview

In one embodiment, the systems and methods may be used in the context of a cruise selling and booking system 110. Figure 1 illustrates the cruise selling and booking system 110 of one embodiment wherein a plurality of customers, agents, and cruise lines interact with a cruise selling and booking system 110 via communication mediums 120 such as the Internet 125. Cruise lines may interact directly with the cruise selling and booking system 110 and/or via a cruise line interface system 130. The cruise selling and booking system 110, in the illustrated embodiment, provides an interactive tool for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. The customer is provided with information about various cruises packages and may book a cruise package utilizing components of the cruise selling and booking system 110 through interaction with an agent.

Using the agent computer, as illustrated in Figure 2A, the agent accesses the components of the cruise selling and booking system 110 to find information about the customer, to provide the customer with information about cruise sailings from the cruise line database 234, and to book cruise packages as desired by the customer. Additionally, the agent may view multiple sets of cruise package and pricing information in a compare display for side-by-side comparison.

In one embodiment, a customer may also access the cruise selling and booking system 110 without necessarily interacting with an agent as illustrated in Figure 2B. For example, a customer may access the cruise selling and booking system 110 via a web based service by utilizing a standard web browser on his own computer to connect to the cruise selling and booking system 110 web page. In one embodiment, should the customer desire the assistance of an agent, the cruise selling and booking system 110 may store the information entered by the customer in the database collection. An agent with access to the cruise selling and booking system 110 may subsequently retrieve the information. This feature provides improved customer/agent interactivity by saving the customers from repeating information which was previously stored in the cruise selling and booking system 110 to each agent with whom they interact. As it is recognized that both customers and agents may access the cruise selling booking system, the term "users" will be used herein to refer to customers and/or agents.

In one embodiment, a system and method of comparing product information may commence with a user access the cruise selling and booking system 110 to search for cruise packages that meet a customer's preferences. The user may utilize the cruise selling and booking system 110 to select a set of sailings of potential interest to the customer. Moreover, the user may then select detailed information about two or more of the sailings for comparison assisting the user with the cruise package selection process. The comparison of product information improves the efficiency and accuracy of the user's decision when selecting the proper cruise package.

II. Comparison Module

In one embodiment, the cruise selling and booking component 220 includes a comparison module 380 used to provide side-by-side comparisons of various cruise package and pricing information. Figure 24 illustrates one embodiment of a comparison module 380 which includes a compare display process 1510. For more information on the compare display process 1510, please refer to the section below entitled "Comparison Processes – Compare Display Process." The comparison module 380 may also include other processes (not shown). For example, the comparison module may include a process that enables the cards of the compare display to scroll simultaneously by anchoring the

cards together such that any scrolling action on one card is mirrored in the other cards. This feature enables the user to readily compare information. For example, as the user scrolls to view the sixth day of the itinerary on one card, the sixth day of the itinerary of the other cards is also scrolled into the user's view. In addition, for adding a new set of data to an empty card, the comparison module may include a process that determines the location of the data in the non-empty cards, finds the corresponding location of the new set of data, and then places the new set of data in the empty card at the appropriate location. This enables a user to add a new card and still view the same data on all of the cards. If a user is looking at the itinerary section of card 1 and adds card 2 and card 3, the comparison module may present the user with card 2 and card 3 such that the itinerary section is display and the data in card 2 and card 3 is aligned with card 1. Such features may be implemented using a variety of user interface features, such as, for example, window coordinates, data markers, and so forth.

In one embodiment, the comparison module 380 is implemented to provide a web browser, frame-based layout that includes three areas for cards of cruise package and pricing information. It is recognized, however, that in other embodiments a different number of cards may be included. The cards graphically present sets of cruise package and pricing information from a variety of cruise lines. The comparison module 380 may be implemented using one or more of a variety of technologies such as, C++, VISUAL BASIC, JAVA, JAVA Script, Active Server Pages ("ASP"), Extensible Markup Language ("XML"), as well as other scripting languages that may be used to dynamically retrieve, generate, process, and/or format the data for a web document.

As used herein, the word module refers to logic embodied in hardware or firmware, or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, C++. A software module may be compiled and linked into an executable program, or installed in a dynamic link library, or may be written in an interpretive language such as BASIC. It will be appreciated that software modules may be callable from other modules or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised of programmable units, such as programmable gate arrays or processors. The modules described herein are preferably implemented as software modules, but may be represented in hardware or firmware.

III. Compare Display

Figure 11A, Figure 11B, and Figure 11C illustrate embodiments of a compare display. Figure 25 illustrates a compare display template for which no cruise packages have been selected. Figure 11A, Figure 11B, and Figure 11C illustrates a compare display for which two of the cruise packages have been selected.

A. Compare Display Template

One embodiment of a compare display template that may be used in the side-by-side comparison of cruise package and pricing information is illustrated in Figure 25. The exemplary compare display template includes three cards 2510, 2520, and 2530, wherein each card includes two primary frames. For example, the first card 2510 includes frames 2512 and 2514; the second card 2520 includes frames 2522 and 2524; and the third card 2530 includes frames 2532 and 2534. Frames 2512, 2522, and 2532 present the title section information as well as the agent selection buttons, "Book/Option," "quote," and "Clear." In one embodiment, these frames remain static as the

user scrolls through the other cruise package and pricing information. The comparison frames 2514, 2524, and 2534 present the primary information about the cruise package and pricing information. In particular, frame 2512 includes agent action buttons for frame 2514 and together they make up card number one. In one embodiment, the information in frame 2514 may change, but the action buttons persist until the user clears the card. The relationship is similar for frames 2522 and 2524 and frames 2532 and 2534.

In one embodiment, the three cards may scroll simultaneously using alignment markers that are programmed into the dynamically generated compare display. The six separate frames thereby represent a total of three cards that are linked together.

The comparison frames 2514, 2524, and 2534 may include fields that are dynamically populated with data. In one embodiment, the fields may be populated if the information is available, though some of the fields may remain empty if the comparison module 380 is unable to provide current or accurate data. In one embodiment, empty fields remain visible to act as place holders so that the selected cards scroll together. Furthermore, in one embodiment, the data may be retrieved from the database collection 230 of the cruise selling and booking system 110, retrieved from external sources, such as, for example, cruise lines, external databases, travel agencies, and so forth, and/or dynamically generated.

While the compare display illustrated in Figure 25 shows three cards each comprising two primary frames, it is recognized that in other embodiments, a different number of cards and/or frames may be used to implement the compare display. For example, in one embodiment, the compare display may include five cards wherein each card includes four frames.

B. Compare Display

The compare display 1110 of Figure 11A displays information about two cruise packages, the Carnival Tropicale and the Princess Dawn Princess, side-by-side. The third card is available such that another set of cruise package and pricing information may selected for display.

In order to accommodate the large amount of information included in each card, the compare display may display a portion of the cards such that the user may utilize scroll bars to enable the user to scroll through a view of the cruise package and pricing information. Figure 11B illustrates one embodiment of a compare display 1110 wherein the top portion of the cards is displayed. Furthermore, in one embodiment, the cards scroll simultaneously such that if a user scrolls up or down one card, the other card(s) scroll accordingly as well. For example, when the user changes the display to view the itinerary section of cruise package 1, the itinerary section of cruise package 2 is also displayed. Figure 11C illustrates one embodiment of a compare display 1110 wherein the user has scrolled to the itinerary section such that as one card scrolled to the itinerary section, the other card scrolled simultaneously. Furthermore, if a user selects to view cruise package 3, the itinerary section of cruise package 3 is displayed aside the other cruise packages and scrolls simultaneously as well. In addition, some of the sections may also include individual scroll bars. Thus, when the agent computer 240 scrolls through the itinerary section of cruise package 1, the itinerary sections of cruise package 2 and cruise package 3 scroll simultaneously.

The illustrated cards in Figure 11A include seven primary sections: the title section 1121, the button section 1122, the cruise summary section 1123, the cruise price summary section 1124, the cabin section 1125, the itinerary

section 1126, and the rules and regulations section 1127. These sections may appear for each card in the exemplary compare display. Detailed cruise package and pricing information for each sailing that the agent chooses is shown in each card. In one embodiment, the information may be retrieved from the database collection 230 of the cruise selling and booking system 110, retrieved from external sources, such as, for example, cruise lines, external databases, travel agencies, and so forth, and/or dynamically generated.

1. Title Section

The title section 1121 includes information regarding the cruise line, the selected ship, and the starting date of travel. In one embodiment, the title section is static and remains on display as the user scrolls through the cruise package and pricing information.

2. Button Section

The button section 1122 includes buttons that permit the user to gather specific information for the customer and to perform tasks that assist in booking and selling of the cruise package. Three buttons appear in the exemplary button section, the "Book/Option" button, the "Quote" button, and the "Clear" button.

a. Book/Option Button

The first button in the button section of the exemplary compare display is the "Book/Option" button. The book function enables the user to book cruises by accepting and providing deposit and booking information to the cruise line via the cruise selling and booking system 110. The option function enables the user to reserve a cruise for a predetermined period of time without submitting a payment and without providing specific customer information to the cruise line such that the cruise package may be booked at a later date. In one embodiment, the predetermined time frame may be set by the cruise selling and booking system 110 and/or the cruise lines. For example, the cruise selling and booking system 110 may allow a hold for fourteen days, while Carnival Cruise Line may only allow holds for seven days. In one embodiment, after the time expires, the offer that the agent presented to the customer becomes void.

When the user selects the "Book/Option" button, the user is provided with a document that presents and requests pertinent information for booking a cruise package. The user may confirm a customer's itinerary, passenger sailing information, cruise details, cabin selections, and the like. The user may also select add-ons, excursions, air transportation, pre/post cruise packages, and insurance. In addition, a worksheet may also be displayed inviting the user to submit information used to process the customer's booking. The worksheet include specific pricing information for each person sailing and records specific options that have been selected for each individual person. In addition, the worksheet may provide sub totals for the various package details, tax, commission details, as well as a total amount due and/or payment status.

The worksheet may be interactive enabling the user to enter information pertaining to any of the options by clicking on the field and entering the information. In one embodiment, the user may populate the fields using a variety of user interface objects, such as, for example, text fields, radio buttons, check boxes, sliding bars, and so forth. In addition, the user may enter the information via a peripheral device or via a download process initiated by other interface objects, such as pull-down menus. The information may then be stored in the database collection 230 of the cruise selling and booking system 110 and/or any other database. Furthermore, the customer information may be transmitted directly to the cruise lines using a variety of methods, such as, for example, database download, facsimile

transmissions, real time queries, agent phone calls, and so forth. Additionally, in one embodiment, the customer booking information is linked to back office software to aid in the process of record keeping and payment tracking.

b. Quote Button

The next button in the button section of the exemplary compare display is the "Quote" button. A user may utilize the quote button to provide a quote for the customer, such as, for example, if a customer is not ready to book or hold a cruise, if the cruise line does not permit access to real time pricing/availability information, or the pricing/availability information has not been updated. In one embodiment, the quote button may be used to store information for other agents so that the task of manually entering information for an individual customer is only done once.

When the quote button is selected, the user is taken to a window enabling the user to enter information pertaining to the customer's desired cruise package, to save the entered information by selecting the add button in the window, and to return to the compare display. Alternatively, the user may cancel the quote and return to compare display without saving any of the entered information.

For example, a user may utilize the quote button when working with a customer who wants to sail with a smaller cruise line for which the cruise selling and booking system 110 may not have current information. The user may save the customer's information and contact the cruise line directly to determine the price for the cruise packages. The user may then determine prices, commission, taxes, and totals, and may enter such information into the window and store the information in the cruise selling and booking system 110.

c. Clear Button

The third button in the button section of the exemplary compare display is the "Clear" button. The clear button removes a previously selected card from the side-by-side comparison. When the user selects the clear button, the information from the card, including the top and the bottom frames is removed, and the other cards on display remain in their current locations prior to the removal process. When the user selects another set of cruise package and pricing information, the set is displayed in the vacated slot. In other embodiments, the cards may shift to one side such that the open card is always the left most card or the right most card.

In one embodiment, the customer may have a lot of flexibility regarding both pricing and dates of travel. The clear button enables an agent to compare a wide variety of cruise packages and pricing schemes thereby reducing the time required to find cruises that a customer may want to book. Cruise package and pricing information may be added and removed from the compare display at the selection of a button. When the user realizes that the cruise is no longer of interest to the customer, he can remove the selection by selecting the clear button creating room for another set of cruise package and pricing information in the compare display.

3. Cruise Summary Section

The cruise summary section 1123 presents information regarding the type of pricing information selected (e.g., "cruise only" package or "cruise/air" package). In addition, the cruise summary section identifies the rate option that the agent used to make the pricing selection as well as the number of nights that the particular ship will be at sea. The cruise summary section may also include the number of passengers and the category of accommodations that was selected.

4. Cruise Price Summary Section

The cruise price summary section 1124 provides various information on the pricing scheme for the selected cruise category and sailing. This information may include price details such as the per person price, port charges, government fees, transportation fees, transportation taxes, miscellaneous charges, insurance amount, deposit amount, and final payment amount. The cruise price summary section may also include information regarding the final payment due date, cabin selection, as well as dining preferences.

5. Cabin Section

The cabin section 1125 provides information on the selected cabin, if any. The exemplary cabin section 1125 includes a "Cabin" button that permits the user to select and/or reserve a cabin. When the "Cabin" button is selected, a cabin assignment worksheet is displayed to the user. This worksheet includes all of the potential cabin locations that correspond to the category selected by the customer and may include cabins for other categories as well. In one embodiment, the potential cabin locations may be limited based upon cabin availability at the time of the query. The cabin availability may be determined by the cruise selling and booking system 110 via an internal inquiry to the database collection 230 or via an external inquiry to a third party database, cruise line, travel agency, and so forth. Depending on the selected category, the user may be presented with a few cabin choices or a wide variety of choices. Furthermore, the user may be presented with the option to view a detailed map that includes all of the cabin locations with corresponding numbers. This map assists the user with his cabin selection as each cruise ship is unique in its cabin categories and locations. After the user has selected a cabin, the user may return to the cabin assignment worksheet.

From the cabin assignment worksheet, the user may reserve a specific cabin location and number for a predetermined amount of time to allow for the completion of any unfinished business prior to completing the cruise booking for the customer. The predetermined amount of time may be set by the cruise selling and booking system 110 and/or the individual cruise lines. The cabin hold feature is offered by many of the cruise lines for a fixed amount of time.

In one embodiment, the user may know the ship on which the customer would like to travel but may be unsure of the available cabin categories. The cabin hold feature enables the user to view the different categories and their cabin locations. The user sees visual representations of the cruise ship and may provide valuable information to the customer. In addition, once the customer decides which cabin he would like to reserve, the user may reserve the cabin while processing other information. For example, if a customer decides to travel under a category five room, then the user can hold a specific category five cabin for ten minutes while gathering the customer's remaining booking information.

Additionally, the cabin section 1125 may also include a "Dining" button that permits the user to select dining preferences for the customer. The "Dining" button, when selected, presents the user with various dining preferences. Some of the more common dining preferences offered by the cruise lines are first or second seating, large or small tables, age of table occupants, and smoking preference. In one embodiment, if a cruise line does not provide dining preferences, the feature appears as "not available."

6. Itinerary Section

The itinerary section 1126 includes specific itinerary information that corresponds to the selected cruise sailing and may include a table of data for each day of the cruise designating the day of the week, the date, and the port. The information may also include the docking and sailing times thereby permitting the customers to plan off-shore excursions subsequent to their cruise. In one embodiment, the itinerary section is independently scrollable within the compare display and offers the user the ability to view the itinerary information without disrupting the simultaneous scrolling feature of the comparison. In other embodiments, the itinerary section of the cards may also permit simultaneous scrolling.

7. Rules and Restrictions Section

The rules and restrictions section 1127 includes specific rules and restrictions to which the customer must agree to prior to booking the cruse. In one embodiment, the rules include general rules, such as, for example, the total deposits/payments, what age constitutes an adult, and credit card acceptance. This section also includes independently scrollable windows as to not disrupt the simultaneous scrolling feature of the comparison. In other embodiments, the rules and restrictions section of the cards may also permit simultaneous scrolling.

While one embodiment of a compare display is illustrated in Figure 11A, it is recognized that in other embodiments, different sets and types of data may be used. Furthermore, additional data may be added and/or some of the illustrated data may be excluded. Furthermore, in other embodiments, the compare display may be used in different environments. For example, the compare display may be used to compare product information, car rental information, hotel information, airline information, real estate information, computer information, and so forth.

IV. Comparison Processes

In one embodiment, the information that is displayed on the page is transferred to the first available opening in the side-by-side comparison. In the current model, the cards are filled from left to right and once three cards are populated, the user must cancel one of the cards as selecting a fourth will not automatically remove a previous selection. It is recognized that in other embodiments, if the user makes a selection when there are no available cards, the comparison module 380 may replace one of the existing sets of information with the newly selected information using a variety of techniques, such as, removing the last added card, the first added card, the card in the first card, and so forth.

In one embodiment, the comparison module 380 assists users in displaying detailed information of up to N different cruise packages at one time where N is a fixed integer. In some embodiments, the fixed integer, N, may be determined in part by the size of the display. The exemplary compare display 1110 of Figure 11A allows the user to display up to three different cruise package summaries at one time, such that N = 3. The comparison module 380 may then retrieve detailed information about the selected cruise packages and display the information in the compare display. After the cards have been filled, the user may change his selections by clearing one or more of the cards and selecting other cruise packages for display. The comparison module 380 may then retrieve the detailed information about the selected cruise packages and display the information in the cleared cards.

A. Compare Display Process

An overview of one embodiment of a compare display process 2410 is shown in Figure 26. Beginning at a start state (block 2610), the compare display process 2410 transitions to the next state (block 2620) and receives a

cruise package selection. The compare display process 2410 may then determine whether there is an available card (block 2630). If no card is available, the compare display process 2410 may return an error message (block 2640) and transition to an end state (block 2680). In other embodiments, the compare display process 2410 may automatically clear one of the cards or query the user for information on which card to clear. If there is an available card, the compare display process 2410 retrieves the corresponding data for the selected cruise package (block 2650). It is recognized that the cruise package and pricing information may include information from internal databases, such as, for example, the database collection, as well as external sources, such as, of example, cruise lines, external databases, travel agencies, and so forth. In addition, the compare display process 2410 may also perform calculations on the information, such as, for example, calculating deposit information, travel insurance costs, and so forth. Next, the compare display process 2410 may format the information for display in the compare display (block 2660). The compare display process 2410 then sends the formatted data to the user for display in the available card (block 2670) and proceeds to the end state (block 2680). In other embodiments, the compare display process 2410 may send unprocessed and unformatted data to the user such that the data is formatted and/or processed by the user's computer.

B. User Selection Process

An overview of one embodiment of a user selection process is shown in Figure 27. Beginning at a start state (block 2710) the user selection process transitions to the next state (block 2720) where, for each of the empty cards, the user may select a cruise package for display (block 2720). If the user decides to change his selection (block 2730), the user may then clear one of the cards (block 2740) and then select another cruise package (block 2750). The user selection process may then return to block 2730 allowing the user to again change his selection. If the user decides not to make any changes, the user selection process may then transition to an end state (block 2760).

V. Conclusion

While certain embodiments of the invention have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the present invention. Accordingly, the breadth and scope of the present invention should be defined in accordance with the following claims and their equivalents.

SYSTEMS AND METHODS OF MAINTAINING CLIENT RELATIONSHIPS

Systems and methods which represent various embodiments and example applications of the invention will now be described with reference to the drawings. Variations to the systems and methods which represent other embodiments will also be described. In one disclosed embodiment, the systems and methods are used to maintain customer/agent relationships and are described in the context of a cruise selling and booking system. The inventors contemplate that the present invention is not limited by the type of environment in which the client relationships are maintained, and that other types of environments may be used, such as, for example, a real estate system, an airline travel system, a car rental system, a car sales system, and so forth. The figures and descriptions, however, relate to embodiments of the invention wherein the relationship is between a customer and a cruise booking agent.

The present invention relates to systems and methods for maintaining customer/agent relationships. One embodiment of the invention includes a system and method for maintaining these relationships based upon a series of rules and permissions that define the association and duration of the customer/agent relationships thereby establishing the notion of agent ownership of customers for a specified time period. More specifically, these rules and permissions

may create and maintain an agent of record relationship in which a customer is matched to an agent based on various activities and transactions that typically occur during the cruise selling and booking process. These activities may include customer/agent interactions, such as, for example, conversations, price lookups, reservations, bookings, and payments.

In one embodiment, the agent of record relationship may exist for a period of time dependent on the nature and duration of the customer/agent interaction. In one aspect, the duration of time which the agent of record relationship exists may prevent the agent's customer from being solicited by other agents who may not have devoted similar amounts of time to working with the customer. In other embodiments, other agents may be able to work with another agent's customer, but are precluded from receiving commission for such work.

One benefit of one embodiment is that the agent of record relationship personalizes the customer experience and reduces the amount of time the customer spends with multiple agents. This relationship benefits the customer by preventing the reiteration of information already presented because the customer is directed to the agent with whom he is already familiar.

Another benefit of one embodiment is that the agent of record relationship further provides the agent with incentive to follow up with customer, throughout the booking process and beyond the benefit of commission, by establishing long term benefits should the agent book a cruise for the customer. Also, the agent of record relationship provides an incentive to move the customer through the booking process in a timely manner as the customer is made available to a general pool of agents should the agent of record not maintain sufficient interaction with the customer.

An additional benefit of one embodiment is that the travel agent is able to manage agent/customer relationships in a more efficient manner saving the travel agent and the customer's time.

In one embodiment, these features are integrated into a cruise selling and booking system that automatically manages the administrative tasks used to determine the customers to which an agent has exclusive access. Furthermore, the cruise selling and booking system includes a series of functions to help the agent maintain ownership of customers by ensuring timely customer follow-up and booking of cruises. It is recognized, however, that in other embodiments, the agent of record relationships may be integrated into other types of systems.

I. Overview

In one embodiment, the systems and methods may be used in the context of a cruise selling and booking system 110. Figure 1 illustrates the cruise selling and booking system 110 of one embodiment wherein a plurality of customers, agents, and cruise lines interact with a cruise selling and booking system 110 via communication mediums 120 such as the Internet 125. Cruise lines may interact directly with the cruise selling and booking system 110 and/or via a cruise line interface system 130 that stores information for one or more cruise lines. The cruise selling and booking system 110, in the illustrated embodiment, provides an interactive tool for compiling, reviewing, and processing information obtained from the cruise lines, customers, and agents. The customer is provided with information about various cruises packages and may book a cruise package utilizing components of the cruise selling and booking system 110 through interaction with an agent.

Using the agent computer 240, as illustrated in Figure 2A, the agent accesses the components of the cruise selling and booking system 110 to find information about the customer, to provide the customer with information about

cruise sailings from the cruise line database 234, and to book cruise packages as desired by the customer. Additionally, the agent may collect and store information about the customer in the customer database 232 and may further access resources of the agent database 238. In one embodiment, the agent database 238 stores information relating to the agents and their customers allowing the agents to better manage customer communication, scheduling, and interactions.

In one embodiment, a customer may also access the cruise selling and booking system 110 without necessarily interacting with an agent as illustrated in Figure 2B. For example, a customer may connect to the cruise selling and booking system 110 via a web based service by utilizing a standard web browser on his own computer to connect to the cruise selling and booking system 110 web page. In one embodiment, should the customer desire the assistance of an agent, the cruise selling and booking system 110 may store the information entered by the customer in the database collection 230. An agent with access to the cruise selling and booking system 110 may subsequently retrieve the information. This feature provides improved customer/agent interactivity by saving the customers from repeating information previously stored in the cruise selling and booking system 110 to each agent with whom they interact.

In one embodiment, a system and method of maintaining customer relationships may commence with a customer interacting with an agent who has the expertise and resources to efficiently assist the customer through the cruise booking process. Because of the amount of time and energy the agent must spend with the customer to book the cruise, the customer/agent relationship becomes an important aspect to ensuring that a high percentage of customers book cruises.

In one embodiment, the cruise selling and booking system 110 recognizes the customer/agent relationship through agent ownership. Agent ownership represents a pairing of customers with agents for a period of time giving an agent preferred access to a customer and his information. The cruise selling and booking system 110 may manage and track agent ownership by using rules of ownership to define the methods and permissible interactions in which the agent may maintain ownership of a customer, the duration or period of time that an agent has exclusive rights to a customer, and the potential booking commission derived from that customer. In addition, the cruise selling and bookings system may use the agent of record to track the agent to which a customer has been assigned. The cruise selling and booking system 110 may also use tools to release the customer from an agent ownership relationship when the ownership has expired allowing other agents to access the customer and form new ownership relations.

The agent of record relationship improves the efficiency with which a customer is serviced by directing the customer to the agent with whom he has had previous experience. Furthermore, the cruise selling and booking system 110 may use the agent of record relationship to determine commissions for each booked cruise allowing agents to be properly compensated for the time they spend with a customer in booking a cruise.

II. Agent Ownership Module

In one embodiment, the cruise selling and booking component 220 includes an agent ownership module 350 used to track and manage the agent of record relationships. Figure 28 illustrates one embodiment of an agent ownership module 350 which includes several processes such as an agent of record creation process 2810, an agent of record identification process 2820, an agent of record protection process 2830, an agent of record change process

2840, and an agent of record override process 2850. For more information on the agent of record processes, please refer to the section below entitled "Agent Ownership Processes." The agent ownership module 350 may also include other processes (not shown).

In one embodiment, the agent ownership module 350 may be implemented using one or more of a variety of technologies such as, C++, VISUAL BASIC, JAVA, JAVA Script, Active Server Pages ("ASP"), Extensible Markup Language ("XML"), as well as other scripting languages that may be used to dynamically retrieve, generate, process, and/or format the data for a web document.

As used herein, the word module, whether in upper or lower case letters, refers to logic embodied in hardware or firmware, or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, C++. A software module may be compiled and linked into an executable program, or installed in a dynamic link library, or may be written in an interpretive language such as BASIC. It will be appreciated that software modules may be callable from other modules or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised of programmable units, such as programmable gate arrays or processors. The modules described herein are preferably implemented as software modules, but may be represented in hardware or firmware.

III. Agent Ownership Processes

In one embodiment, the agent ownership module 350 includes several processes such as an agent of record creation process 2810, an agent of record identification process 2820, agent of record protection process 2830, an agent of record change process 2840, and an agent of record override process 2850.

A. Creating an Agent of Record

Figure 29 illustrates one embodiment of an agent of record creation process 2810 that creates an association between an agent and a new customer, such as, for example, when a new customer contacts a travel agency for the purposes of booking a cruise. Beginning at a start state (block 2910), the agent of record creation process 2810 proceeds to the next state and receives and agent's ID (block 2920). To send an identifier, the agent may sign on to the cruise selling and booking system 110 using a login or he may submit his ID if he is already signed on. Typically, the first interaction between the new customer and agent involves the agent collecting personal information about the customer. The personal information may include name, address, contact information, desired cruise destination, cruise dates, and the like. The information collected by the agent during the interaction with the customer is sent to the cruise selling and booking system 110. The agent of record creation process 2810 receives the collected information (block 2930). This information includes a unique customer ID which may be automatically generated by the system, manually entered by the agent, based on the customer's personal information (e.g., full name, social security number), a combination of the above, and so forth. The agent of record creation process 2810 may then create a customer record using the personal information (block 2940) and store the information in the customer database 232 (block 2950) which may be subsequently retrieved and edited by the agent, the agent's manager, and so forth. The agent of record creation process 2810 may also create an agent of record relationship (block 2960) in which the agent collecting the information about the customer is designated as the agent of record for the customer for a certain amount of time. The

agent of record creation process 2810 may then store the association in the customer database 232 (block 2970) and proceed to an end state (block 2980).

It is recognized that the agent of record creation process 2810 may be implemented differently in other embodiments. For example, the agent of record creation process 2810 may wait to store the customer information until the agent of record has been created and/or the agent of record creation process 2810 may store the association in the agent database 238 or another database.

B. Identifying an Agent of Record

After an agent of record association has been created, in one embodiment, the agent ownership module 350 may automatically determine the agent to whom a customer may be directed when he contacts the travel agency during subsequent interactions.

Figure 30 illustrates one embodiment of an agent of record identification process 2820 that returns the agent of record, if any, for a customer. Beginning at a start state (block 3010), the agent of record identification process 2820 ("identification process") proceeds to the next state and receives a customer ID (block 3020). Proceeding to the next state, the identification process 2820 searches the customer database 232 for the customer ID and retrieves the corresponding customer record (block 3030). Next, the identification process 2820 determines whether the customer record exists (block 3040). If the customer record does not exist, the identification process 2820 proceeds to block 3050. If the customer record does exist, the identification process 2820 determines whether an agent of record has been assigned (block 3060). If an agent of record has not been assigned, the identification process 2820 proceeds to block 3050. If an agent of record has been assigned, the identification process 2820 determines whether the agent of record has expired (block 3070). If the agent of record has expired, the identification process 2820 proceeds to block 3050. At block 3050, the identification process 2820 returns a designator signifying that any available agent may work with the customer and proceeds to an end state (block 3080). If the agent of record has not expired, the identification process 2820 returns a designator indicating the agent of record (block 3080) and proceeds to an end state (block 3090).

It is recognized that the agent of record identification process 2820 may be implemented differently in other embodiments. For example, the agent of record identification process 2820 may return "NULL" or a set of different messages if the customer record does not exist, the agent of record has not been assigned, and/or the agent of record has expired.

C. Protecting an Agent of Record

In one embodiment, when a customer is assigned an agent of record, the agent is protected from competing agents which might otherwise attempt to book a cruise for the customer and acquire the booking commission without the original agent's permission or knowledge. The agent ownership module 350 may protect the agent of record by preventing access to customer records by a non-agent of record for a period of time as designated by the rules of agent ownership.

Figure 31 illustrates one embodiment of an agent of record protection process 2830 ("protection process 2830"). Beginning at a start state (block 3110), the protection process 2830 proceeds to the next state and receives the agent ID (block 3120). Proceeding to the next state, the protection process 2830 receives a customer ID (block

3130). Proceeding to the next state, the protection process 2830 determines the customer's agent of record (block 3140). One embodiment of determining the customer's agent of record process is illustrated in Figure 30 and described above, though it is recognized that other embodiments may be used. The protection process 2830 then determines whether the agent ID matches the agent of record or if the customer is available (block 3150). If not, the protection process 2830 denies the agent access to the customer's information and may return a message, such as, for example, "You are not authorized to access this record" (block 3160) and proceeds to an end state (block 3180). If the agent ID matches or the customer is available, the protection process 2830 returns the customer's record (block 3170) and proceeds to the end state (block 3180).

It is recognized that other embodiments of a protection process 2830 may be used. For example, the protection process 2830 may protect the agent of record by allowing a non-owning agent access to the customer record and may in one embodiment assign commission to the agent of record, and so forth.

D. Changing the Agent of Record

In one embodiment, the agent ownership module 350 may include a change agent of record process which allows the agent of record to be changed. For example, the agent may be reassigned and/or the expiration date may be altered.

Figure 32 illustrates one embodiment of an agent of record change process 2840 ("change process 2840"). Beginning at a start state (block 3205) the change process 2840 proceeds to the next state and receives the agent ID (block 3210). Next, the change process 2840 receives the customer ID (block 3215) and determines the agent of record (block 3220). One embodiment of determining the agent of record is illustrated in Figure 30 and described above, however, it is recognized that other embodiments may be used. Proceeding to the next state, the change process 2840 determines whether the agent of record matches the agent ID or is set to any available agent (block 3225). If not, the change process 2840 returns an error message (block 3230), such as, for example, "You are not authorized to access this record" and proceeds to an end state (block 3260). If the agent of record does correspond to the agent ID or the customer is available, the change process 2840 receives an agent activity (block 3235). Next, the change process 2840 determines the time period associated with the agent activity (block 3240). The change process 2840 may determine the time period, such as, for example, by looking up the activity in a table of rules and retrieving the time period that corresponds to the activity. Using the time period, the change process 2840 may then calculate the expiration date (block 3245). For example, if the time period is ten days, then the change process 2840 may take the current date and add ten days to the current date, and may use the calculated as the expiration date. Next, the change process 2840 sets the expiration date to the calculated date and the agent of the record to the agent (block 3250). It is recognized that in other embodiments, if the agent of record already matches the agent ID, the agent ID does not need to be reset. Proceeding to the next state, the change process 2840 stores the agent of record (block 3255). In one embodiment, the agent of record may be stored in the customer database 232, in the agent database 238, and/or in other databases. In addition, the agent record may be stored as a field in the customer of record. After storing the agent of record, the change process 2840 proceeds to an end state (block 3260).

E. Overriding the Agent of Record

In one embodiment, the agent ownership module 350 may include an override feature which permits the agent of record assignment to be reassigned by a user with the proper authorization such as that of a manager. Should the non-owning agent desire to acquire ownership of a customer, the agent ownership module 350 may permit a manager to authorize a reassignment of ownership by changing the agent of record for a temporary period of time or permanently.

In one situation, the reassignment in ownership may be temporary in nature and used to assign a sales commission to an agent who was not the initial agent of record but spent enough time and energy with a customer to merit receiving the commission for the booking. Such situations may arise, for example, when the original agent of record is not present for a prolonged period of time, on vacation, and/or unavailable to service the customer. In this embodiment, temporary ownership reassignment acknowledges the efforts made by the non-owning agent in booking the cruise for the customer. The agent of record subsequently reverts to the original agent of record after the temporary period of time preserving the customer pool of the original agent of record.

In another situation, the reassignment in ownership may be permanent in nature and used to designate a new permanent agent of record. In such a situation, agent ownership does not revert to the original agent of record, and a new permanent agent of record may be designated for a previously booked customer such that the original agent of record will no longer work with the customer. Such management features may be available to accommodate changes in responsibilities and employment status of existing agents and to ensure that customers are adequately serviced by the travel agency.

Figure 33 illustrates one embodiment of an agent of record override process 2850 ("override process 2850"). Beginning at a start state (block 3310), the override process 2850 proceeds to the next state and receives an agent ID (block 3320) and receives a customer ID (block 3330). Proceeding to the next state, the override process 2850 receives an expiration date (block 3340). Next, the override process 2850 retrieves the agent of record (block 3350). In one embodiment, the agent of record may be retrieved from the agent database 238, the customer database 232, and/or another database. It is recognized that in other embodiments, the agent of record may be stored in the customer record, such as, for example, as a field in the customer record, and so forth. Proceeding to the next state, the override process 2850 sets the agent of record to the agent ID and sets the expiration date to the received expiration date (block 3360). Next, the override process 2850 stores the agent of record (block 3370). As mentioned above, the agent of record may be stored in the agent database 238, the customer database 232, and/or another database. After the agent of record has been stored, the override process 2850 proceeds to an end state (block 3380).

It is recognized that the agent of record override process 2850 may be implemented differently in other embodiments. For example, the agent of record override process 2850 may only set the agent ID and/or the expiration date.

IV. Activities

As previously discussed, a number of activities may be performed by the agents to affect the duration of agent ownership. The number, duration, and type of activities incorporated in the cruise selling and booking system 110 provide a structured set of resources through which the agent can help the customer research potential cruise options and make a decision as to which cruise package to book. Each of the activities performed by the agent may increase

the amount of time the agent maintains ownership of the customer, and each of the activities is tracked by the cruise selling and booking system 110. In one embodiment, the duration of agent ownership designated for each activity is based, in part, on the time required for the agent to perform the activity as well as the perceived importance of the activity in ultimately ensuring the customer books a cruise. Thus, those activities which are determined to more likely result in customer cruise bookings may be associated with longer customer ownership durations.

Figure 34 illustrates example agent ownership activities 3410 that may be used by the cruise selling and booking system 110. A duration of agent ownership may be assigned to each activity and applied to agents as they interact with potential customers. The exemplary activities include customer profiles 3420, brochures 3430, calls 3440, quotes 3450, leads 3460, options 3470, and bookings 3480.

The customer profile activity 3420 is performed by the agent when he acquires personal information from the customer which may include, for example, name, address contact information, desired cruise destination, household membership, cruise dates, and so forth. The customer profile may be stored in the customer database 232 and may be accessed, viewed, and updated as needed. This profile allows the agent to retain important personal information about the customer, thus improving the agent's ability to relate to the customer.

The brochure activity 3430 is performed by the agent when sending a customer additional information about one or more cruise lines in the form of a flyer, mailer, brochure, advertisement, or the like. This information may be presented in a hardcopy form that is sent to the customer through conventional methods such as using the postal service or electronically transmitting it to the customer using computer-based methods including email, web pages, facsimile, and other methods of directing the customer to the source of information. The cruise selling and booking system 110 facilitates the brochure activity 3430 by enabling the agent to view and use a customer's personal contact information stored in the customer profile and to ensure that the brochure information is received by the customer. Additionally, the cruise selling and booking system 110 may present the agent with a listing of the available brochure information related to individual cruise lines and further display a listing of those brochures which have already be requested/received by the customer.

A call activity 3440 is used by the cruise selling and booking system 110 to track and record calls made among the agent and customers. The call activity 3440 function of the cruise selling and booking system 110 may provide the agent with the name and contact information of the customer and a field in which the reason or purpose for the call may be recorded. The call activity 3440 may include numerous methods of customer interaction, such as, for example, phone calls, in-person consultations, and/or email messages. In each case, the interaction may be documented by the cruise selling and booking system 110 and may extend the agent ownership duration by a requisite period of time.

A quote activity 3450 is registered in the cruise selling and booking system 110 when the agent creates and/or retrieves a quote for the customer. The quote may be obtained electronically through the cruise selling and booking system 110 itself or may be acquired by other methods such as contacting the cruise line directly or looking up pricing information in a hardcopy listing. As with the call activity 3450, the cruise selling and booking system 110 may credit the agent with an assigned duration of ownership so as to allow the agent to pursue the customer further for the purposes of booking a cruise.

A lead activity 3460 is created when the agent begins the process of determining actual cruises which meet the customers preferences. In one embodiment, the cruise selling and booking system 110 provides functionality to guide the agent through the lead activity creation by providing a number of selectable criteria which include, cabin occupancy, sailing date preferences, cruise destination, cruise duration, cruise line selection, cruise ship selection, and other criteria which narrow the choices for cruises to a more manageable subset. The subset of cruises may then be viewed by the agent to provide the customer with detailed information about the specific cruises and to help the customer make a decision as to which cruise to book.

An option activity 3470 is created when the agent reserves space on a particular cruise line, ship, and sailing for the customer. The creation of an option activity 3470 indicates that the customer has expressed significant interest in one or more cruises and would like to hold space on the cruise ship to ensure that he will have a cabin available to book. In one embodiment, option activities 3470 hold or reserve space on the cruise line without financial obligation by the customer and have a variable length of expiration depending on the selected cruise line and particular sailing offered. Option activities 3470 typically remain open for a week or more and often represent one of the final customer activities prior to booking a cruise. In one embodiment, the cruise selling and booking system 110 allocates an extended duration of agent ownership so as to ensure that the agent who has generated the option activity will have sufficient time to work with the customer in order to book the cruise.

A booking activity 3480 occurs when the agent reserves a cabin on a particular cruise sailing and the customer provides a deposit or payment, in part or whole, so as to ensure that the reserved room cannot be acquired by other interested customers. The booking activity 3480 of the illustrated embodiment results in the permanent assignment of ownership of the customer to the agent who performed the booking activity 3480. In subsequent interactions, the customer will be assigned the same agent of record and no lapses in duration of activities will change the agent ownership status of the customer. It is recognized that in other embodiments, another duration of time may be associated with the booking activity 3480 such that the assignment of ownership is temporary rather than permanent.

The above-described activities are meant to illustrate the various types of activities that may be used by the cruise selling and booking system 110. It is recognized however, that in other embodiments, other types of activities may be included.

V. Agent of Record Rules

Agent ownership may provide an additional incentive to the agent of record to book a cruise for a new customer by maintaining the agent of record association for a finite period of time. The period of time for which the agent remains the agent of record for the customer may depend upon the number and/or type of activities and interactions the agent has with the customer. In one embodiment, the agent may lose the status of agent of record for the customer should a period of time elapse without sufficient follow up activities, interactions, or customer bookings. This time lapse results in the agent of record expiring and the customer returning to an unassigned state (e.g., no agent of record) wherein other agents may establish a relationship with the customer. When a new agent (or the original agent) interacts with the customer in subsequent activities, an agent of record change creates a new agent of record for the customer in a similar manner as described above.

Table 1 illustrates example time periods for which an agent of record remains the agent of record. For example, if Agent A makes a phone call to Customer X on June 1, 2000, Agent A will remain the agent of record until June 10, 2000, at which point Customer X will be returned to the pool of available customers unless Agent A performs another activity that affects the expiration date. For example, if Agent A then gives Customer X a quote on June 5, 2000, the agent of record is extended such that it will not expire until June 15, 2000. Next, if Agent A books Customer X on a cruise, Agent A becomes Customer X's permanent agent of record.

Activity	Time Period
Customer Profile	Midnight of the Next Day
Brochure	10 Days
Phone Call	10 Days
Quotes	10 Days
Leads	Midnight of the Next Day
Options	10 Days
Booking	No Expiration

TABLE 1

Furthermore, Table 1 illustrates one set of possible activities and time periods and that other activities and/or time periods may be used. Furthermore, in one embodiment, the cruise selling and booking system 110 may include a rule module (not shown) which allows a user to enter in agent activities and set the time period associated with the activities. For example, a manager may use the rule module to state that if an agent creates a lead, the length of the agent record will last for fifteen days rather than ten as illustrated in Table 1. In addition, other information may be included in the rules. For example, the rules may be based on different types of incentive programs, time periods, cruise line data, and so forth. For example, if an agent creates a quote within the first fifteen days of December 2000, the agent of record length may be for twenty days whereas it is otherwise ten days. In another example, an option for one cruise line may expire after fifteen days, whereas an option for another cruise line may expire after eighteen days. In addition, the time period may be based on business days or may be based on calendar days. Thus, it is clear that a variety of rules, activities, time periods, and so forth may be used and that the invention is not limited to the examples provided herein.

VI. Customer States

In one embodiment, should the duration of ownership lapse without additional activities or bookings taking place, the customer profile and personal information are retained by the cruise selling and booking system 110, and the agent ownership status including the agent of record assignment are removed from the customer profile. The customer profile is further added to a pool of available customers and may be solicited to by other agents until a new activity or booking transaction for the customer takes place.

If the agent performs additional activities within the remaining duration of agent ownership, however, an extension of the duration of the agent ownership status is processed by the cruise selling and booking system 110. Activities which may be added to the customer profile include, for example, opening options, reservations, bookings, and other tasks which further indicate that the customer is moving forward towards booking a cruise with the agent. The cruise selling and booking system 110 grants the agent additional agent ownership time to preserve the agent's right to commission for booking the cruise should the customer make a decision in a timely manner. The extension of duration further provides the agent with incentive to pursue the customer in a timely manner so as to prevent other agents from having access to a customer which has expressed an interest in booking a cruise.

Subsequent to the addition of activities to the customer profile, an agent may further extend the duration of agent ownership by the addition of new activities within the duration in which the agent maintains his status as agent of record for the customer. In the instance where a customer booking occurs within the duration of agent ownership, the agent may be granted permanent ownership of the customer. The cruise selling and booking system 110 recognizes the activity of the agent booking the customer on the cruise, assigns the agent of record the appropriate commission consideration, and updates the customer profile to reflect the permanent status of the booking agent as the agent of record.

The permanent assignment of agent of record status provides a significant incentive to the agent to book customers on cruises. With each new customer booking, the agent builds a pool of customers to which he has exclusive booking rights. Should these customers book a cruise in the future, the permanent assignment of agent of record status ensures the current agent will receive the commission for the booking. Over time, the agent's customer pool of permanent ownership increases resulting in a more steady source of commission for the agent.

Customers with no active ownership due to lapse of the duration of ownership may be acquired by other agents who perform additional activities for the customer. The agent who performs the activities becomes the new agent of record and is subject to the same rules and ownership durations as the previous agent. Should the activity duration again lapse, the customer is returned to the available customer pool with an unassigned ownership status and the process repeats until the customer is successfully booked on a cruise and permanent ownership status is assigned.

In one embodiment, agent ownership directs the eligibility for sales commission resulting from customer booking. For example, a customer may have been previously assigned an agent of record through one of the above mentioned activities including calls, quotes, brochures, options, leads, or bookings. During the duration of agent ownership for the customer, which may be temporary or permanent, in one embodiment, another non-owning agent may interact with the customer and perform various activities including booking a cruise. The customer interaction with the non-owning agent however may not result in a transfer of ownership of the customer. Additionally, non-booking activities which the customer performs with the non-owning agent may not affect the duration of ownership of the current agent of record.

In one embodiment, should the customer decide to book a cruise with the assistance of the non-owning agent, the sales commission for the cruise booking is directed to the designated agent of record as recognized by the cruise selling and booking system 110. Thus, the cruise selling and booking system 110 ensures that bookings for customers with previously assigned agents of record result in directing the sales commission to the agent of record without regard

for the agent which actually processed the booking. Thus, the agent ownership/agent of record features of the cruise selling and booking system 110 protect an agent's customers from other competing agents while they are properly owned.

Figure 35 illustrates sample customer/agent states in which a customer may exist based on the duration of time for which an agent maintains ownership of a customer. The state transitions are based in part on activities between the customer and agent that may set and/or extend the ownership duration. These activities may include, for example, the activities listed in Table 1.

Beginning at a start state (state 3510), the customer proceeds to a customer profile state (state 3520), when a new customer begins interacting with an agent. In the customer profile state, the customer's agent of record is set to "any." During the course of interaction, the agent may create a customer profile as discussed above. If the agent collects customer profile information, the customer transition to an activity state (state 3540) wherein the customer's agent of record is set to the agent's identification and the expiration date is set.

In one embodiment, using the rules of Table 1, the duration of agent ownership for a customer profile activity lasts until midnight the next day after the customer profile is created. The condition of agent ownership may be temporary in nature for the purpose of encouraging the agent to follow up with the customer in a timely manner and increase the booking rate for cruises. The cruise selling and booking system 110 maintains a record of the agent ownership status of the customer, designates the agent which has created the profile of the customer as the agent of record, and calculates the remaining time (duration) of ownership.

From the customer profile state (state 3520), the customer may transition in three ways. The ownership may lapse after the time period from the creation of the customer profile until midnight the next day; an agent may make an additional activity; and/or an agent may make a booking. If the time period lapses, then the customer transitions into an available state (state 3530), wherein the customer is available for any agent who wishes to try and obtain ownership of the customer by performing an activity. In one embodiment, the customer remains in the available state (state 3530) until an agent performs some activity or performs a booking, though in one embodiment, the customer may be removed from the available state (state 3530) if no one has made any activity or progress with the customer for a designated period of time.

A customer may also transition from the customer profile state (state 3520) to an activity state (state 3540) if the owning agent performs some type of activity, such as, for example, a brochure, a phone call, a quote, a lead, or an option. If the owning agent performs one or more of these activities, the customer then transitions to the activity state (state 3540) and remains in the activity state (state 3540) until the time expires, additional activity is performed resetting the expiration date, or a booking is performed.

The customer may also transition from the customer profile state (state 3520) to a booking state (state 3550) if the owning agent books the customer on a cruise. In one embodiment, using the rules of Table 1, the booking state (state 3550) is a final state. Once an agent has booked a customer on a cruise, the agent becomes the customer's permanent agent of record.

From the activity state (state 3540), the original agent may book the customer on a cruise and therefore transition to the booking state (state 3550). The agent may also perform additional activity and transition back into

the activity state (state 3540) but with a new expiration date, or the agent may allow the ownership to lapse and therefore the customer would transition to the available state (state 3530). Once a customer has reached the available state (state 3540), the customer is available to receive any activity from any agent. If the customer receives an activity, the customer transitions to the activity state (state 3540) for the duration of the time period. In addition, from the available state (state 3530) , an agent may book a customer on a cruise in which the customer then transitions to the final booking state (state 3550).

It is recognized that various states may be used in addition to or instead of the states discussed herein.

IV. Agent Ownership Displays

The cruise selling and booking system 110 may include displays that illustrate agent ownership, such as, for example, a main menu display and a customer search results display.

A. Main Menu Display

In one embodiment, upon successful login, the agent is directed to a main menu web page 510, as illustrated in Figure 5, which includes buttons or links for accessing the various features of the cruise selling and booking system 110. For example, the exemplary main menu display allows the agent to access features such as selling and booking 520, back office 530, inventory management 540, product management 550, and administrative features 560. The main menu 510 serves as a starting point for each of the features described above. In one embodiment, the agent may return to the main menu 510 throughout the cruise selling and booking system process.

The main menu 510 may also provide the agent with an activity listing 570 which may include categories for bookings 571, brochures 572, leads 573, options 574, and quotes 575. In Figure 5, each of the categories has an associated numerical value that indicates the number of currently active customers which fall into the activity listing category. The purpose of the activity listing 570 is to provide the agent with a quick summary of information for those customers he should contact. Each activity listing 570 enables the agent to access a listing of the customers who fall within the activities groups described above. In the illustrated embodiment, the agent may select any of the activity listings 570 which will then direct him to a separate screen showing the details of the selected activity listing.

Additionally, the main menu may include a "to do" list 580 which includes subcategories such as phone calls 581 and tasks 582. The "to do" list 580 provides a reminder for activities for which the agent should initiate and follow up. In a similar manner to the activity listing 570 above, the agent may select any of the items in the "to do" list 580 in order to access a listing of customers who fall within the subcategories as well as information for contacting the customers.

B. Customer Search Results Display

One embodiment of agent ownership wherein the cruise selling and booking system 110 may include functionality for searching for and displaying names of customers. As illustrated in Figure 13, the cruise selling and booking system 110 may include a search web page 610. In the exemplary search web page 610, the agent may search for customers based on data entered in fields which correspond to the information stored in the customer database 232.

The search web page 610 may be organized in a set of query fields 620 that may be used by the agent to narrow the search criteria for identifying customers and may include fields identifying the customer name, contact

information, or travel information useful in searching for and identifying customers. The search web page 610 may also includes a search results section 630 which displays the names and identifying information of customers matching the selected search criteria. Each search result displays a brief summary of identifying information, such as name 632, nickname 633, and main address 634, and may be further selected to provide more detailed additional information in subsequent screens. As shown in Figure 13, the agent of record 635 for each customer may be additionally identified in the search results section 630. By displaying the agent of record 635 for a customer, the agent performing the search may determine the availability of a particular customer for soliciting cruise sailings and identify customers which he currently owns.

In one embodiment, the cruise selling and booking system 110 may limit the amount of information a non-owning agent may obtain about a customer. For example, an agent performing a search may not be able to obtain additional information about a customer beyond that shown in the search results section 630 unless the agent of record status associated with the customer matches that of the agent currently logged onto the cruise selling and booking system 110. This feature is useful in preventing non-owning agents from obtaining additional customer information which might be used to contact customers owned by other agents. Thus, the cruise selling and booking system 110 limits the accessibility of detailed customer information to the designated agent of record during the time that a customer has an established agent ownership relationship.

V. Conclusion

While certain embodiments of the invention have been described, these embodiments have been presented by way of example only, and are not intended to limit the scope of the present invention. Accordingly, the breadth and scope of the present invention should be defined in accordance with the following claims and their equivalents.

WHAT IS CLAIMED IS:

1. A method for selling and booking cruise packages utilizing a web browser program to electronically communicate with a cruise service web server via a data communications network, the method comprising:

utilizing the web browser program to log onto the cruise service web server over the data communications network;

submitting to the cruise service web server customer profile information relating to a customer;

submitting to the cruise service web server customer sailing preference information relating to the customer;

receiving a set of cruise sailings in a first electronic document from the cruise service web server that relate to the customer sailing preference information;

selecting a plurality of cruise sailings from the set of cruise sailings;

submitting the plurality of cruise sailings to the cruise service web site;

receiving detailed cruise information in a second electronic document form the cruise service web server relating to the plurality of cruise sailings;

interactively comparing the detailed cruise information;

submitting a booking request for one of the plurality of cruise sailings to the cruise service web site; and

receiving a booking confirmation from the cruise service web site.

2. A cruise booking system implemented in a web server environment wherein a plurality of remote users use web browser programs to electronically communicate with the cruise booking system via a data communications network that provides information for a plurality of cruise sailings and facilitates booking of cruises, the cruise booking system comprising:

a customer database configured to electronically store customer data;

a cruise line database configured to electronically store cruise line data;

a customer management program module configured to track and manage information relating to a plurality of customers in the customer database;

a cruise information program module configured to search for and provide information about requested cruise sailings in the cruise line database; and

a cruise booking program module configured to book reservations for a selected cruise sailing.

3. The cruise booking system of Claim 2 further comprising:

an agent database configured to electronically store agent data;

an agent management program module configured to track and manage a plurality of agents and their relationships with the plurality of customers.

4. The cruise booking system of Claim 3 wherein the agent management program module is further configured to determine whether an agent has ownership over a specified customer.

5. The cruise booking system of Claim 3 wherein the agent management program module is further configured to determine which agent, if any, has ownership over a customer.

6. The cruise booking system of Claim 3 wherein the agent management program module is further configured to determine commission for the plurality of agents based at least upon the relationship between the plurality of agents and the plurality of customers.

7. The cruise booking system of Claim 2 further comprising:

a rate options program module configured to retrieve and display rates options for a selected cruise sailing.

8. The cruise booking system of Claim 2 further comprising:

a pricing display program module configured to construct an electronic price matrix of information from the cruise line information database illustrating rates for cabin categories of a cruise sailing.

9. The cruise booking system of Claim 2 further comprising:

a compare display program module configured to construct a side-by-side, multi-window electronic display of at least two cruise packages where the at least two cruise packages may be compared at the same time.

10. The cruise booking system of Claim 2 further comprising:

a payment program module configured to receive and process payment requests.

11. The cruise booking system of Claim 10 wherein the payment program module is further configured to send payment information to an external banking system.

12. The cruise booking system of Claim 2, wherein the cruise information program module is further configured to determine available fares by querying a computerized reservation system to determine the availability of the requested cruise sailings.

13. The cruise booking system of Claim 2, wherein the cruise information program module is further configured to receive information about a plurality of cruise lines, to convert the information into a common format, and to electronically display the converted information in the common format.

14. The cruise booking system of Claim 2, wherein the cruise information program module is further configured to retrieve cruise pricing data from a computerized reservation system.

15. The cruise booking system of Claim 2, wherein the cruise information program module is further configured to retrieve cruise pricing data from a contract database.

16. The cruise booking system of Claim 2, wherein the cruise booking program module is further configured to reserve a cruise cabin by contacting a computerized reservation system to verify the availability of the cruise cabin and to book the cruise cabin.

17. A method for booking cruises utilizing a cruise web server environment to electronically communicate with a plurality of remote users using web browser programs, the method comprising:

receiving a range of search criteria from a remote user's web browser;

obtaining cruise package information that relates to the range of search criteria;

sending cruise package information to the remote user's web browser program;

receiving a selected cruise package from the remote user's web browser program; and

booking the selected cruise package.

18. In a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network, a network node comprising:

a cruise booking node responsive to a request from the user node to return cruise package information that relates to a range of search criteria and a request from the user node to book a selected cruise package from the user node.

19. A system for booking cruises, the system comprising:

an electronic data structure of cruise package information wherein the cruise package information includes information from a plurality of cruise lines;

a first program module configured to receive requests for cruise package information;

a second program module configured to obtain cruise package information from the data structure based at least upon a search request;

a third program module configured to prepare cruise package information for electronic display;

a fourth program module configured to output cruise package information for electronic display; and

a fifth program module configured to book a cruise package based at least upon a booking request.

20. In a computer system that implements a web site that is accessible to a community of travel agents using web browser programs to communicate via a data communications network, a method of assisting the community of travel agents in selling cruises to a plurality of customers, the method comprising:

receiving an customer identifier from a travel agent's web browser program, wherein the customer identifier represents a customer;

using the customer identifier to retrieve from an electronic customer database corresponding customer information;

receiving customer preferences from the travel agent's web browser program, wherein the customer preferences include at least one of the customer's preferred dates of travel, preferred cruise destination, or preferred cruise line supplier;

using least one of the customer preferences or the customer information to retrieve from an electronic cruise sailing database a set of potential cruise packages;

transmitting the set of potential cruise packages to the travel agent's web browser program, wherein the set of potential cruise packages are viewable in a first electronic web document;

receiving an electronic identifier representing a selected cruise package from the travel agent's web browser program, wherein the selected cruise package is chosen from the set of potential cruise packages; and

booking the customer on the selected cruise package.

21. The method of Claim 20 further comprising:

receiving an agent identifier from the travel agent's web browser program, wherein the identifier represents the travel agent; and

determining and recording within an electronic travel agent database compensation for the travel agent for the booking.

22. The method of Claim 20, wherein transmitting the set of potential cruise packages to the travel agent for presentation to the customer further comprises:

receiving a set of selected pricing categories from the travel agent's web browser program;

using the selected pricing categories to query the electronic cruise sailing database for a set of cruise packages pricing information related to the selected pricing categories; and

transmitting the set of cruise package pricing information to the travel agent's web browser program in a set of pricing matrices viewable in a second electronic web document, wherein the set of pricing matrices are organized by cruise sailing and pricing categories.

23. The method of Claim 20, wherein transmitting the set of potential cruise packages to the travel agent's web browser for presentation to the customer further comprises:

transmitting a side-by-side comparison viewable in a third electronic web document, wherein the travel agent may select at least two of the set of potential cruise packages to be presented in the side-by-side comparison display for direct comparison viewable in a fourth electronic web document.

24. In a computer system that implements a web site that is accessible to a community of customers using web browser programs to communicate via a data communications network, a method of assisting the community of customers in selecting and booking cruises, the method comprising:

receiving a customer identifier from a customer's web browser program;

using the customer identifier to retrieve from an electronic customer database corresponding customer information;

receiving customer preferences from the customer's web browser program, wherein the customer preferences include at least one of the customer's preferred dates of travel, preferred cruise destination, or preferred cruise line supplier;

using least one of the customer preferences or the customer information to retrieve from an electronic cruise sailing database a set of potential cruise packages;

transmitting the set of potential cruise packages for display in a web document to the customer's web browser program;

receiving an electronic identifier representing a selected cruise package from the customer's web browser program, wherein the selected cruise package is chosen from the set of potential cruise packages; and

booking the customer on the selected cruise package.

25. The method of Claim 24, wherein transmitting the set of potential cruise packages to the customer's web browser program further comprises:

transmitting a side-by-side comparison display for display in the web document, wherein the customer may select at least two of the set of potential cruise packages to be presented in the side-by-side comparison display for direct comparison.

26. A system for selling cruises to a customer implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network, the system comprising:

a cruise search software module configured to receive a set of customer preferences from a remote user's web browser program, to search for a set of cruise packages based on at least the set of customer preferences, and to transmit the set of cruise packages to the user's web browser program; and

a reservation software module configured to receive a reservation request from the user's web browser program, wherein the reservation request is selected from the set of cruise packages, and to reserve a cruise package corresponding to the reservation request.

27. The system of Claim 26 further comprising:

a customer management software module configured to receive a customer identifier related to the set of customer preferences and to maintain a record of the set of customer set of preferences organized by at least the customer identifier.

28. The system of Claim 26 further comprising:

a server software module configured to transmit data between the user's web browser program and the system and wherein the server software module is in communication with at least the preferences software module, the cruise search software module, the cruise comparison software module, the reservation software module, and the cruise booking software module .

29. The system of Claim 26 further wherein the user is a travel agent.

30. The system of Claim 26 further wherein the user is a customer.

31. A computer-implemented system which implements a computer program wherein remote users search for cruise package information and book cruises over an electronic communications network, the system comprising:

a customer management software system configured to manage customer bookings and track customer preferences;

an agent management software system configured to track travel agent interaction with customer accounts and determine and maintain records of compensation for the respective travel agents for successful customer bookings; and

a cruise line management software system configured to maintain information on a plurality of cruise sailings wherein the information on the plurality of cruise sailings is used by the customer management software system to manage customer bookings and track customer preferences.

32. The system of Claim 31 further comprising:

a booking software system configured to maintain information on customer bookings.

33. In a computer system that implements web browser programs that are capable of accessing a remote cruise booking web site, a method of assisting a community of travel agents utilizing the web browser programs to select and book cruises via electronic communication with the remote cruise booking web site, the method comprising:

submitting an electronic customer identifier to the remote cruise booking web site, wherein the customer identifier represents a customer;

determining customer preferences wherein the customer preferences represent preferred cruise sailing information;

submitting an electronic representation of the customer preferences to the remote cruise booking web site;

receiving a set of potential cruise packages formatted for display in a first electronic web document from the remote cruise booking web site;

submitting an electronic cruise package identifier representing a selected cruise package to the remote cruise booking web site, wherein the selected cruise package is chosen from the set of potential cruise packages; and

submitting a booking request to the remote cruise booking web site.

34. The method of Claim 33 further comprising:

receiving a set of pricing categories formatted for display in a second electronic web document from the remote cruise booking web site;

selecting at least one of the set of pricing categories;

submitting at least one electronic pricing category identifier representing the at least one of the set of pricing categories;

receiving a set of cruise package pricing information related to the at least one of the set of pricing categories formatted for display in a third electronic web document ; and

using the set of cruise package pricing information to assist the customer in selecting the appropriate cruise package.

35. In a computer system that implements a web browser program that is capable of accessing a remote cruise booking web site via an electronic communications network, a method of assisting customers in selecting and booking cruises, the method comprising:

submitting a customer identifier to the remote cruise booking web site;

determining customer preferences wherein the customer preferences represent preferred cruise sailing information;

submitting customer preferences to the remote cruise booking web site;

receiving a set of potential cruise packages from the cruise booking web site for display in a first web document;

submitting a selected cruise package electronic identifier to the remote cruise booking web site, wherein the selected cruise package is chosen from the set of potential cruise packages; and

submitting a booking request to the remote cruise booking web site.

36. A system for selling cruises to a customer implemented as part of a cruise web server environment wherein a plurality of remote users communicate with the system via a data communications network utilizing web browser programs, the system comprising:

a preferences programming module configured to receive a set of customer preferences from a remote user's web browser program;

a cruise search programming module configured to search for cruises based on at least the set of customer preferences and to return a set of cruise packages to the remote user's web browser program;

a cruise comparison programming module configured to format and transmit the set of cruise packages to the remote user' web browser program;

a reservation programming module configured to receive a reservation request from the remote user's web browser program wherein the reservation request is selected from the set of cruise packages; and

a cruise booking programming module configured to reserve a cruise package corresponding to the reservation request.

37. A method for selling and booking cruise packages utilizing a web browser program to electronically communicate with a cruise service web server via a data communications network, the method comprising:

means for utilizing the web browser program to log onto the cruise service web server over the data communications network;

means for submitting to the cruise service web server customer profile information relating to a customer;

means for submitting to the cruise service web server customer sailing preference information relating to the customer;

means for receiving a set of cruise sailings for display in a first electronic document that relate to the customer sailing preference information;

means for selecting a plurality of cruise sailings from the set of cruise sailings;

means for submitting the plurality of cruise sailings to the cruise service web server;

means for receiving detailed cruise information for display in a second electronic document relating to the plurality of cruise sailings;

means for interactively comparing the detailed cruise information;

means for submitting a booking request for one of the plurality of cruise sailings to the cruise service web server; and

means for receiving a booking confirmation from the cruise service web server.

38. A method for booking cruises utilizing a cruise web server environment to electronically communicate with a plurality of remote users using web browser programs, the method comprising:

means for receiving a range of search criteria from the remote user's web browser program;

means for obtaining cruise package information that relates to the range of search criteria;

means for sending cruise package information to the remote user's web browser;

means for receiving a selected cruise package from the remote user's web browser program; and

means for booking the selected cruise package.

39. A method for selecting cruise sailings among a plurality of cruise packages utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

providing an electronic cruise sailing database wherein the electronic cruise sailing database includes detailed information about a plurality of cruise sailings for a plurality of cruise lines;

receiving a set of customer preferences from a remote user's web browser;

searching the electronic cruise sailing database for a subset of the cruise sailings that correspond to the set of customer preferences; and

returning the subset of the cruise sailings to the remote user's web browser for display as an electronic document.

40. The method of Claim 0, further comprising:

formatting the subset of the cruise sailings in a table format.

41. The method of Claim 0, wherein searching the electronic cruise sailing database includes formulating a query to search for exact matches.

42. The method of Claim 0, wherein searching the electronic cruise sailing database includes formulating a query to search for close matches.

43. The method of Claim 0, wherein searching the electronic cruise sailing database includes formulating a query to search for exact matches and close matches.

44. A cruise qualification system for managing and suggesting cruise sailing data implemented in a web server environment wherein a plurality of remote users using web browser programs electronically communicate with the cruise qualification system via a data communications network, the cruise qualification system comprising:

an electronic cruise sailing database of cruise sailing data wherein the cruise sailing data includes data for at least two cruise lines;

a customer query program module configured to send and receive queries to a user, wherein the queries include cruise preference data; and

a cruise sailing search program module configured to search the electronic cruise sailing database for cruise sailing data that corresponds to the cruise preference data.

45. The cruise qualification system of Claim 44, further comprising a cruise data presentation program module configured to present the cruise sailing data that corresponds to the preference data, where in the cruise sailing data is presented in the form of an electronic document.

46. The cruise qualification system of Claim 44, wherein the cruise sailing data that corresponds to the cruise preference data includes exact matches.

47. The cruise qualification system of Claim 44, wherein the cruise sailing data that corresponds to the cruise preference data includes close matches.

48. The cruise qualification system of Claim 44, wherein the cruise sailing data that corresponds to the cruise preference data includes exact matches and close matches.

49. The cruise qualification system of Claim 44, further comprising an electronic customer database of customer data, wherein the cruise preference data includes at least a portion of the customer data.

50. The cruise qualification system of Claim 44, wherein the cruise sailing search program module is further configured to search electronic the cruise sailing database for data that corresponds to a customer's stored data.

51. A method for searching a cruise sailing and booking system for cruise sailing data using a web browser program to electronically communicate with a remote cruise web server via a data communications network, the method comprising:

submitting cruise preference data to the remote cruise web server, wherein the cruise preference data designates at least one of preferred sailing dates, preferred sailing length, preferred destination, and preferred sailing port; and

receiving from the remote cruise web server a set of cruise sailing data that matches or closely matches at least a portion of the cruise preference data, wherein the set of cruise sailing data is retrieved from an electronic cruise sailing database of cruise sailing data for a plurality of cruise lines.

52. The method of Claim 51, further comprising selecting at least one of the set of cruise sailing data for additional detailed information.

53. The method of Claim 51, wherein the cruise sailing data includes at least one of itinerary information, cabin availability, and pricing information.

54. The method of Claim 51, wherein the set of cruise sailing data is retrieved based in part on customer information in the cruise preference data.

55. A method for selecting cruise package information utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a range of search criteria from a remote user's web browser program;

obtaining cruise package information for a plurality of cruise lines that relates to the range of search criteria from an electronic database of cruise line data; and

outputting the cruise package information to the remote user's web browser for display in an electronic document.

56. In a network comprising a user node having a browser program coupled to the network, the user node providing request for information on the network, a network node comprising:

a cruise booking node responsive to a request to obtain cruise package information from the user node that relates to a range of search criteria received from said user node, wherein the cruise package information includes information from at least two cruise lines.

57. The network mode of Claim 56, further comprising a cruise line database configured to store the cruise package and pricing information for the at least two cruise lines.

58. A cruise selling system for selecting cruise package information implemented in a web server system wherein a plurality of remote users communicate via a data communications network with the cruise selling system using web browser programs, the cruise selling system comprising:

an electronic database of cruise pricing information wherein the cruise pricing information comprises information from different cruise lines;

a software module programmed to receive a range of search criteria;

a software module programmed to obtain cruise price information from the electronic database related to the range of search criteria; and

a software module programmed to output cruise package information.

59. A system for finding cruise package information that corresponds to a user's preferences implemented in conjunction with a web browser program wherein the web browser program communicates with a remote cruise web server system via a data communications network, the system comprising:

a user preference programming module configured to send a set of user preferences to the remote cruise web server system; and

a display programming module configured to receive a display of cruise package and pricing information corresponding to the set of user preferences.

60. The system of Claim 59, wherein the cruise package and pricing information also corresponds in part to customer profile information stored in an electronic customer database of the remote cruise web server system.

61. The system of Claim 59, wherein the set of user preferences includes at least one of number of passengers per cabin, travel date, travel region, cruise line, cruise ship, and departure date.

62. The system of Claim 59, wherein the system communicates with the remote cruise web server system using standard web based protocols.

63. A method for selecting cruise sailings among a plurality of cruise packages utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

means for providing an electronic cruise sailing database wherein the electronic cruise sailing database includes detailed information about a plurality of cruise sailings for a plurality of cruise lines;

means for receiving a set of customer preferences from a remote user's web browser;

means for searching the electronic cruise sailing database for a subset of the cruise sailings that correspond to the set of customer preferences; and

means returning the subset of the cruise sailings to the remote user's web browser for display as an electronic document.

64. A method for searching a cruise sailing and booking system for cruise sailing data using a web browser program to electronically communicate with a remote cruise web server via a data communications network, the method comprising:

means for submitting cruise preference data to the remote cruise web server, wherein the cruise preference data designates at least one of preferred sailing dates, preferred sailing length, preferred destination, and preferred sailing port; and

means for receiving from the remote cruise web server a set of cruise sailing data that matches or closely matches at least a portion of the cruise preference data, wherein the set of cruise sailing data is retrieved from an electronic cruise sailing database of cruise sailing data for a plurality of cruise lines.

65. A method of presenting cruise pricing information for display by a plurality of web browser programs, wherein the method utilizes a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using the web browser programs and the cruise pricing information includes real-time pricing and availability data, the method comprising:

receiving a selected cruise sailing from a remote user's web browser program;

identifying rate options stored in an electronic cruise line database that correspond to the selected cruise sailing;

sending the rate options to the remote user's web browser program;

receiving a set of selected rate options from the remote user's web browser program;

identifying cabin pricing categories stored in the electronic cruise line database that correspond to the selected cruise sailing and the set of selected rate options;

obtaining cruise price information from the electronic cruise line database that corresponds to the cabin pricing categories; and

preparing cruise price information for display in a price summary as part of an electronic document by the remote user's web browser.

66. The method of Claim 65, wherein the price summary is formatted as a matrix of cruise price information.

67. A method of filtering cruise pricing information for display to a remote user's web browser program utilizing a cruise web server environment to electronically communicate with a the remote user's web browser program via a data communications network, the method comprising:

receiving a selected cruise sailing from the remote user's web browser program;

identifying rate options stored in an electronic database that correspond to the selected cruise sailing;

sending the rate options to the remote user's web browser program for display as an electronic document;

receiving a set of selected rate options from the remote user's web browser program; and

using the set of selected rate options to retrieve pricing information from the electronic database that corresponds to the selected cruise sailing and to formulate a query that filters the pricing information based at least upon the selected rate options.

68. A method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, wherein the cruise price information includes real-time pricing and availability data, the method comprising:

sending a first request for information on a cruise sailing to the remote cruise web server system; and

receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the price matrix display is displayed in the web browser program as an electronic document.

69. A method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

sending a first request for information on a cruise sailing to the remote cruise web server system;

receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server system;

sending a selection of rate options from the set of rate options; and

receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the cruise price information corresponds to the selection of rate options and the price matrix display is displayed in the web browser program as an electronic document.

70. A method of filtering cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

sending a first request for information on a cruise sailing to the remote cruise web server system;

receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server system, wherein the set of rate options are formatted for display as an electronic document by the web browser program;

selecting a selection of rate options from the set of rate options; and

sending the selection of rate options to the remote cruise web server system.

71. A method of using a computer to enable a remote user to compare cruise package pricing information from a cruise booking web server system, wherein the remote user electronically communicates with the cruise booking web server system using a web browser program via a data communications network and at least a portion of the cruise package pricing information includes real-time pricing and availability data, the method comprising:

receiving a request for cruise price information for at least two cruises from the remote user's web browser program;

preparing the cruise price information for display in an electronic document that includes a price summary matrix; and

sending the price summary matrix to the remote user's web browser program.

72. The method of Claim 71, wherein the electronic document is a web page document.

73. In a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network, a network node comprising:

a cruise booking node responsive to a request for cruise price information for at least two cruises from the user node wherein the cruise booking node provides the user node with a price summary of the cruise price information.

74. The network node of Claim 73, wherein the cruise booking node is configured to use rate options to filter the cruise price information of the price summary.

75. The network node of Claim 73, wherein the cruise booking node is configured to use selected categories to filter the cruise price information of the price summary.

76. The method of Claim 73, wherein the price summary includes a plurality of selectable price matrices.

77. The network node of Claim 73, further comprising a cruise line database configured to store cruise package and pricing information for at least two different cruise lines, wherein the cruise line database is in communication with the cruise booking node.

78. A system for displaying cruise price information implemented in a web server environment wherein a plurality of remote users communicate with the system via a data communications network using web browser programs, the system comprising:

an electronically stored data structure of cruise price information wherein the cruise price information includes information from different cruise lines;

a program module configured to receive requests for cruise information from a remote user's web browser program;

a program module configured to obtain cruise price information from the electronically stored data structure based at least upon a price summary request;

a program module configured to prepare cruise price information for a display as a price summary in an electronic document; and

a program module for outputting the prepared cruise price information to the remote user's web browser program.

79. The system of Claim 78, wherein the price summary is in table format.

80. A method for analyzing cruise package pricing category information utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a set of rate options from a remote user's web browser program;

obtaining cruise package information relating to the set of rate options from an electronic database of cruise pricing information; and

outputting the cruise package information in a pricing table for display by the remote user's web browser program.

81. In a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network, a network node comprising:

a cruise booking node responsive to a request from the user node, wherein the cruise booking node queries an electronic database of cruise information for cruise package information that relates to a set of rate options received from said user node and forwards the cruise package information to the user node.

82. The network node of Claim 81, wherein the electronic database is a cruise line database configured to store rate options for at least two different cruise lines.

83. A system for analyzing cruise package information implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network, the system comprising:

an electronically stored data structure of cruise price information wherein the cruise price information includes information from different cruise lines;

a program module configured to receive a set of rate options from a remote user's web browser program;

a program module configured to obtain real-time cruise price information from the electronically stored data structure, wherein the obtained real-time cruise price information relates to the set of rate options; and

a program module for outputting cruise package information in a price summary for display by the remote user's web browser program.

84. The system of Claim 83, wherein the price summary is in table format.

85. A system for comparing cruise package pricing options implemented in a web server environment wherein a plurality of remote users utilize web browser programs to electronically communicate with the system via a data communications network, the system comprising:

a cruise sailing selection software component configured to receive a request for cruise pricing information for a selected sailing from a remote user's web browser program;

a pricing options software component configured to search for a set of pricing options that correspond to the selected sailing in an electronic database of cruise information, to send the set of pricing options to the remote user's web browser program, and to receive a set of selected pricing options from the remote user's web browser program;

a pricing category software component configured to search for cruise pricing information in the electronic database of cruise information, wherein the cruise pricing information relates to the set of selected pricing options; and

a display software component configured to process and format the cruise pricing information for display in a pricing matrix by the remote user's web browser program, wherein the pricing matrix is organized at least in part by the pricing categories.

86. A system for comparing cruise package pricing options implemented in conjunction with a web browser program, wherein the web browser program electronically communicates with a remote cruise web server via a data communications network, the system comprising:

a cruise sailing selection software component configured to send requests for real-time cruise pricing information to the remote cruise web server, wherein the real-time cruise pricing information is organized into pricing categories;

a pricing options selection software component configured to send requests to the remote cruise web server for filtering the cruise pricing information based at least upon a set of selected pricing options; and

a display software component configured to receive the requested filtered, real-time cruise pricing information from the remote cruise web server and to display the filtered, real-time cruise pricing information using the web browser program in a pricing matrix, wherein the pricing matrix is organized at least in part by the pricing categories.

87. The system of Claim 86, wherein the pricing options selection software component is further configured to receive a set of pricing options from the remote cruise web server, wherein the set of selected pricing options are selected from the set of pricing options.

88. A method of presenting cruise pricing information user's web browser program utilizing a cruise web server environment to electronically communicate with a the remote user's web browser program via a data communications network, the method comprising:

means for receiving a selected cruise sailing from a remote user's web browser program;

means for identifying rate options stored in an electronic database that correspond to the selected cruise sailing;

means for sending the rate options to the remote user's web browser program for display as an electronic document;

means for receiving a set of selected rate options from the remote user's web browser program;

means for identifying cabin pricing categories stored in the electronic database that correspond to the selected cruise sailing and the set of selected rate options;

means for obtaining cruise price information from the electronic database that corresponds to the cabin pricing categories; and

means for preparing cruise price information for display by the remote user's web browser program in price summary.

89. A method of requesting cruise price information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

means for sending a first request for information on a cruise sailing to the remote cruise web server system;

means for receiving a set of rate options corresponding to the cruise sailing from the remote cruise web server system, wherein the set of rate options are formatted for display as an electronic document by the web browser program;

means for sending a selection of rate options from the set of rate options to the remote cruise web server; and

means for receiving a price matrix display of cruise price information corresponding to the cruise sailing from the remote cruise web server system, wherein the cruise price information corresponds to the selection of rate options.

90. A method of providing cruise package and pricing information for comparison utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a selection of at least two cruise packages from a remote user's web browser program;

obtaining cruise package and pricing information that corresponds to the at least two cruise packages from an electronic database of cruise data;

preparing the cruise package and pricing information for display in an electronic web document; and

sending the prepared cruise package pricing information to the remote user's web browser program.

91. The method of Claim 0, wherein the at least two cruise packages correspond to at least two cruise lines.

92. A method of using a computer to compare cruise package and pricing information utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a request for cruise package and pricing information for at least two cruise different cruise lines from a remote user's web browser program;

retrieving cruise package and pricing information that corresponds to the request from a database of electronically stored cruise line data; and

outputting the cruise package and pricing information for display as an electronic document by the remote user's web browser program.

93. The method of Claim 92 further comprising preparing the cruise package and pricing information for the at least two different cruise lines for side-by-side display.

94. A method of requesting cruise package and pricing information for comparison using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

sending a request to the remote cruise web server system for cruise package and pricing information for at least two different cruise lines; and

receiving cruise package and pricing information from the remote cruise web server system that corresponds to the request, wherein the cruise package and pricing information was retrieved from an electronic database of cruise line data and the cruise package and pricing information is formatted for side-by-side display by the web browser program.

95. A method of using a computer to book a cruise package using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

sending a request to the remote cruise web server system for cruise package and pricing information for at least two cruise different cruise ships; and

receiving from the remote cruise web server system the cruise package and pricing information for the at least two different cruise ships, wherein the cruise package and pricing information is displayed in a side-by-side display using the web browser program.

96. The method of Claim 95 further comprising preparing the cruise package and pricing information for the at least two different cruise ships for side-by-side display.

97. In a network comprising a user node having a browser program coupled to the network, the user node providing requests for information on the network, a network node comprising:

a cruise booking node responsive to a request to retrieve cruise package and pricing information for at least two different cruise lines from the user node, wherein the cruise booking node retrieves cruise package and pricing information from an electronic database for display in an electronic document and sends the cruise package and pricing information to the user node.

98. The network node of Claim 97, wherein the cruise package and pricing information is prepared for side-by-side display.

99. The network node of Claim 97, wherein the electronic database is a cruise line database configured to store cruise package and pricing information for at least two different cruise lines wherein the cruise line database is in communication with the cruise booking node.

100. A system for comparing cruise packages implemented in a web server environment, wherein a plurality of remote users using web browser programs electronically communicate with the system via a data communications network, the system comprising:

an electronically stored data structure of cruise package and pricing information wherein the cruise package and pricing information includes information from different cruise lines;

a program module configured to receive a display request from a remote user's web browser program;

a program module configured to obtain cruise package and pricing information from the electronically stored data structure based at least upon the display request;

a program module configured to prepare the obtained cruise package and pricing information for display in an electronic web document; and

a program module configured to output to the remote user's web browser program the prepared cruise package and pricing information for display in the electronic web document.

101. The system of Claim 100, wherein the display is a side-by-side display.

102. A method of organizing cruise package and pricing information for display utilizing a cruise selling and booking web server system to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a first identifier corresponding to a first cruise package from a remote user's web browser program;

retrieving a first set of cruise package and pricing information from an electronic database, wherein the first set of cruise package and pricing information corresponds to the first identifier;

receiving a second identifier corresponding to a second cruise package from the remote user's web browser program;

retrieving a second set of cruise package and pricing information from the electronic database, wherein the second set of cruise package and pricing information corresponds to the second identifier;

formatting at least a portion of the first set of cruise package and pricing information and at least a portion of the second set of cruise package and pricing information for display in a side-by-side comparison section of an electronic document, wherein the side-by-side comparison section includes at least a first window and a second window; and

returning to the remote user's web browser program the formatted at least a portion of the first set of cruise package and pricing information and at least a portion of the second set of cruise package and pricing information.

103. The method of Claim 102, wherein the electronic database includes a cruise information database.

104. The method of Claim 102, wherein the electronic database includes a cruise pricing database.

105. The method of Claim 102, wherein the electronic database includes a cruise information database and a cruise pricing database.

106. The method of Claim 102, wherein the electronic database includes an internal database and an external database.

107. The method of Claim 102, wherein retrieving a first set of cruise package and pricing information further includes querying a first cruise line system that corresponds to the first cruise package.

108. The method of Claim 102, wherein formatting at least a portion of the first set of cruise package and pricing information and at least a portion of the second set of cruise package and pricing information for display includes preparing the at least a portion of the first set of cruise package for display in the first window and preparing the at least a portion of the second set of cruise package for display in the second window.

109. The method of Claim 102, wherein the first window and the second window are configured to be displayed side-by-side.

110. The method of Claim 102, wherein the first window and the second window are configured to scroll at the same time.

111. The method of Claim 108, wherein the first window and the second window are configured to be displayed side-by-side.

112. The method of Claim 108, wherein the first window and the second window are configured to scroll at the same time.

113. A method of using a computer to compare cruise package information using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

sending a request for a first set of cruise package and pricing information to the remote cruise web server system;

sending a request for a second set of cruise package and pricing information to the remote cruise web server system;

receiving from the remote cruise web server system the first set of cruise package and pricing information in a first window of a display, wherein the display is included in a web document accessible by the web browser program; and

receiving from the remote cruise web server system the second set of cruise package and pricing information in a second window of the display.

114. The method of Claim 113, wherein the first window and the second window are displayed side-by-side.

115. The method of Claim 113 further comprising:

sending a request to clear one of the first window or the second window to the remote cruise web server system; and

viewing the display using the web browser program wherein the selected one of the first window or the second window is cleared.

116. The method of Claim 114 further comprising:

sending a request for a third set of cruise package and pricing information to the remote cruise web server system; and

receiving from the remote cruise web server system the third set of cruise package and pricing information in the selected one of the first window or the second window.

117. A method of providing cruise package information for display utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a request for cruise package and pricing information from a remote user's web browser program;

determining whether a card is available;

if there is no card available, returning an error message to the remote user's web browser program; and

if card is available, retrieving the requested cruise package and pricing information from an electronic database of cruise data and returning to the remote user's web browser program the cruise package and pricing information for electronic display in an available card.

118. The method of Claim 117, further comprising:

processing the cruise package and pricing information.

119. A system for comparing cruise package information implemented in conjunction with a web browser program, wherein the web browser program communicates with a remote cruise web server system via a data communications network, the system comprising:

a selection software component configured to send requests to the remote cruise web server system for cruise package and pricing information for at least two cruise packages; and

a display software component configured to display in the web browser program the requested cruise package and pricing information for the at least two cruise packages in a side-by-side display as part of an electronic document.

120. The system of Claim 119, wherein the selection software component is further configured to send requests to the remote cruise web server system for clearing at least a portion of the display.

121. A method of providing cruise package and pricing information for comparison utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

means for receiving a selection of at least two cruise packages from a remote user's web browser program;

obtaining cruise package and pricing information that corresponds to the at least two cruise packages from an electronic database of cruise data;

means for preparing the cruise package and pricing information for display in an electronic web document; and

means for sending the prepared cruise package pricing information to the remote user's web browser program.

122. A method of using a computer to book a cruise package using a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

means for sending a request to the remote cruise web server system for cruise package and pricing information for at least two cruise different cruise ships; and

means for receiving from the remote cruise web server system the cruise package and pricing information for the at least two different cruise ships, wherein the cruise package and pricing information is displayed in a side-by-side display using the web browser program.

123. A system for tracking agent interaction with customers implemented in a web server environment wherein a plurality of remote users utilizing web browser programs electronically communicate with the system via a data communications network, the system comprising:

an electronic customer database configured to store information about a plurality of customers;

an electronic agent database configured to store information about a plurality of agents;

an electronic rules database configured to store rules that define temporal relationships between the plurality of customers and the plurality of agents; and

an agent ownership program module in communication with the customer database, the agent database, and the rules database, wherein the agent ownership program module is configured to control agent access to information about the plurality of customers in the customer database based at least upon the temporal relationships between the plurality of customers and the plurality of agents.

124. The system of Claim 123, wherein the rules are based at least upon the agent's activity with the customer.

125. The system of Claim 123, wherein the rules define time periods associated with agent activities.

126. The system of Claim 123, wherein the rules are based at least upon the agent's cruise selling and booking activity with the customer.

127. The system of Claim 125, wherein the agent activities include at least one of creating a customer profile, sending the customer a brochure, calling the customer, calculating a quote, creating a lead, creating an option, and booking a cruise package.

128. A method for managing agent ownership of customers utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving and agent identifier that represents an agent from a remote user's web browser program;

receiving a customer identifier that represents a customer from the remote user's web browser program;

verifying that the customer is available for interaction with the agent by querying an electronic database of agent and customer information;

receiving an agent activity from the remote user's web browser program;

determining a time window for agent activity based at least upon at least one agent ownership rule, wherein the at least one agent ownership rule is stored in the electronic database;

creating an agent of record association between the agent and the customer wherein the agent is designated as the customer's agent of record for the allotted amount of time; and

storing the agent of record association in the electronic database.

129. The method of Claim 128, wherein the agent activity includes activity related to selling and booking cruise packages.

130. The method of Claim 128, wherein the agent activity includes at least one of creating a customer profile, sending the customer a brochure, calling the customer, calculating a quote, creating a lead, creating an option, and booking a cruise package.

131. A method of verifying agent ownership of a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving an agent identifier representing an agent from a remote user's web browser program;

receiving a customer identifier representing a customer from the remote user's web browser program;

retrieving a customer record from an electronic customer database, wherein the customer record corresponds to the customer and the customer record includes an agent of record;

determining whether the agent of record corresponds to the agent represented by the agent identifier; and

returning a message to the remote user's web browser program signifying whether the agent of record corresponds to the agent represented by the agent identifier.

132. The method of Claim 131 further comprising determining whether the agent of record has expired.

133. The method of Claim 131, wherein the customer record includes an agent of record expiration date.

134. The method of Claim 133 further comprising determining whether the agent of record expiration date matches or is before the current date.

135. The method of Claim 131, wherein determining whether the agent of record corresponds to the agent represented by the agent identifier includes determining whether the agent of record corresponds to any available agent.

136. The method of Claim 131, wherein the message includes the customer record.

137. A method for changing an agent of record association between an agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving an agent identifier representing an agent from a remote user's web browser;

receiving a customer identifier representing a customer from the remote user's web browser;

receiving an activity that represents a communication between the agent and the customer from the remote user's web browser;

retrieving a customer record from an electronic database, wherein the customer record corresponds to the customer and the customer record includes an agent of record association;

setting the agent of record association to correspond to the agent represented by the agent identifier; and

storing the agent of record association in the electronic database.

138. The method of Claim 137, wherein the activity that represents a communication between the agent and the customer includes activity related to selling and booking cruise packages.

139. The method of Claim 137, wherein the activity that represents a communication between the agent and the customer includes at least one of creating a customer profile, sending the customer a brochure, calling the customer, calculating a quote, creating a lead, creating an option, and booking a cruise package.

140. The method of Claim 137, wherein the customer record includes an agent of record expiration date.

141. The method of Claim 139 further comprising determining the agent of record expiration date for the agent of record association.

142. The method of Claim 141, wherein determining the agent of record expiration date includes searching a rules database configured to store rules that define lengths of time associated with agent activities and using the rules to calculate the agent of record expiration date.

143. The method of Claim 137, wherein the electronic database is a customer database.

144. The method of Claim 137, wherein the electronic database is an agent database.

145. The method of Claim 137, wherein the electronic database is an activity database.

146. The method of Claim 137 further comprising:

receiving a user identifier from the remote user's web browser program; and

verifying that the user identifier corresponds to a user who has agent of record override privileges by querying the electronic database for agent of record override privileges.

147. A method for tracking and maintaining relationships among clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

submitting an agent identifier that corresponds to an agent to the remote cruise web server system;

submitting a customer identifier that corresponds to a customer to the remote cruise web server system; and

receiving agent ownership information from the remote cruise web server system, wherein the agent ownership information corresponds to the customer and the customer's assigned agent signifying whether the agent may proceed with working with the customer.

148. The method of Claim 147, wherein the remote cruise web server system is implemented in conjunction with a cruise selling and booking system.

149. The method of Claim 147 further comprising receiving customer information from the remote cruise web server system, wherein the customer information corresponds to the customer if the customer does not have an assigned agent.

150. The method of Claim 147 further comprising receiving customer information from the remote cruise web server system, wherein the customer information corresponds to the customer if the customer's assigned agent corresponds to the agent.

151. A method for using an agent ownership system to update an existing relationship between clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

submitting an agent identifier that corresponds to an agent to the remote cruise web server system;

submitting a client identifier to the remote cruise web server system that corresponds to a client with whom the agent has an existing relationship;

submitting an agent activity to the remote cruise web server system; and

receiving a time period for which the relationship is valid from the remote cruise web server system.

152. The method of Claim 151, wherein the agent activity relates to selling and booking cruise packages.

153. The method of Claim 151, wherein the agent activity include at least one of creating a client profile, sending the customer a brochure, calling the client, calculating a quote, creating a lead, creating an option, and booking a cruise package.

154. The method of Claim 151, wherein the time period is calculated based at least upon rules that define temporal relationships between clients and agents, wherein the rules are stored in an electronic database included in the remote cruise web server system.

155. The method of Claim 152, wherein the rules are based at least upon the agent's activity with the client.

156. The method of Claim 152, wherein the rules define time periods associated with agent activities.

157. A method of identifying an agent of record utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving a customer identifier representing a customer from a remote user's web browser;

retrieving a customer record from an electronic customer database, wherein the customer record corresponds to the customer identifier;

determining whether an agent of record has been assigned to the customer record;

returning an agent of record designator to the remote user's web browser if the agent of record has been assigned; and

returning an available agent designator to the remote user's web browser if the agent of record has not been assigned.

158. The method of Claim 157 further comprising determining whether a customer record exists by querying the electronic database.

159. The method of Claim 157 further comprising determining whether the agent of record has expired.

160. The method of Claim 157, wherein the customer record includes an agent of record field.

161. The method of Claim 157, wherein the customer record includes an expiration date field.

162. A method for overriding an agent of record association between a first agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving an agent identifier representing a second agent from a remote user's web browser program;

receiving a customer identifier representing a customer from the remote user's web browser program;

retrieving agent of record data corresponding to the customer identifier from an electronic database;

setting the agent of record data to the agent identifier;

receiving an expiration date from the remote user's web browser program;

retrieving agent of record data from the electronic database, wherein the agent of record data corresponds to the customer identifier;

setting the agent of record data to correspond to the agent identifier and the expiration date; and

storing the agent of record data in the electronic database.

163. The method of Claim 162 further comprising:

receiving a user identifier from the remote user's web browser; and

verifying that the user identifier corresponds to a user who has agent of record override privileges.

164. The method of Claim 162, wherein the electronic database is a customer database.

165. The method of Claim 162, wherein the electronic database is an agent database.

166. A method of creating an agent of record association between an agent and a customer utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

receiving an agent identifier representing an agent from a remote user's web browser program;

receiving customer information about a customer from the remote user's web browser program;

creating a customer record;

creating an agent of record association between the customer and the agent; and

storing the customer record in an electronic database.

167. The method of Claim 166, wherein the customer record includes an agent of record field.

168. The method of Claim 167, wherein creating an agent of record association includes setting the agent of record field to the agent identifier.

169. The method of Claim 166 further comprising setting an agent of record expiration date based at least upon a customer profile creation activity.

170. The method of Claim 167, wherein storing the customer record in a electronic database includes storing the agent identifier in the agent of record field of the customer record.

171. The method of Claim 166, wherein the electronic database includes an agent database.

172. The method of Claim 166, wherein the electronic database includes a customer database.

173. The method of Claim 166, wherein the electronic database includes an agent database and a customer database

174. The method of Claim 166, wherein the customer information includes at least one of, name, address contact information, desired cruise destination, household membership, and cruise dates.

175. A system for tracking agent interaction with customers implemented in conjunction with a web browser program, wherein the web browser program electronically communicates with a remote cruise web server system via a data communications network, the system comprising:

an agent identifier program module configured to submit to the remote cruise web server system an agent identifier that corresponds to an agent;

a client identifier program module configured submit to the remote cruise web server system a client identifier that corresponds to a client with whom the agent has an existing relationship;

an agent activity program module configured to submit to the remote cruise web server system an agent activity wherein the agent activity corresponds to the agent identifier and the client identifier; and

a time program module configured to receive a time period for which the relationship is valid from the remote cruise web server system.

176. A method for managing agent ownership of customers utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs, the method comprising:

means for receiving and agent identifier that represents an agent from a remote user's web browser program;

means for receiving a customer identifier that represents a customer from the remote user's web browser program;

means for verifying that the customer is available for interaction with the agent by querying an electronic database of agent and customer information;

means for receiving an agent activity from the remote user's web browser program;

means for determining a time window for agent activity based at least upon at least one agent ownership rule, wherein the at least one agent ownership rule is stored in the electronic database;

means for creating an agent of record association between the agent and the customer wherein the agent is designated as the customer's agent of record for the allotted amount of time; and

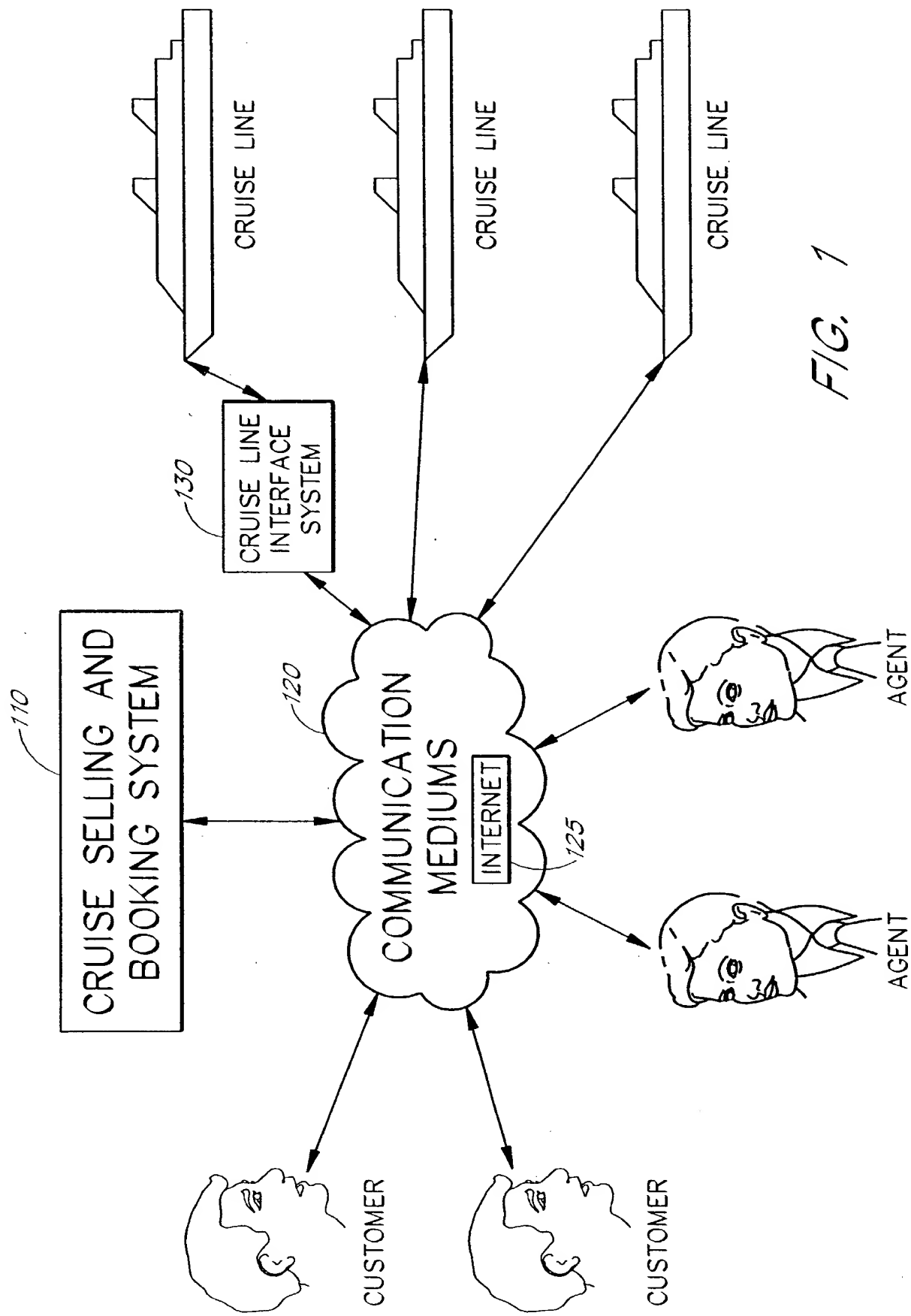
means for storing the agent of record association in the electronic database.

177. A method for tracking and maintaining relationships among clients and agents, wherein the method uses a web browser program to electronically communicate with a remote cruise web server system via a data communications network, the method comprising:

means for submitting an agent identifier that corresponds to an agent to the remote cruise web server system;

means for submitting a customer identifier that corresponds to a customer to the remote cruise web server system; and

means for receiving agent ownership information from the remote cruise web server system, wherein the agent ownership information corresponds to the customer and the customer's assigned agent signifying whether the agent may proceed with working with the customer.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CRUISE LINE
CRUISE LINE
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CRUISE LINE INTERFACE SYSTEM
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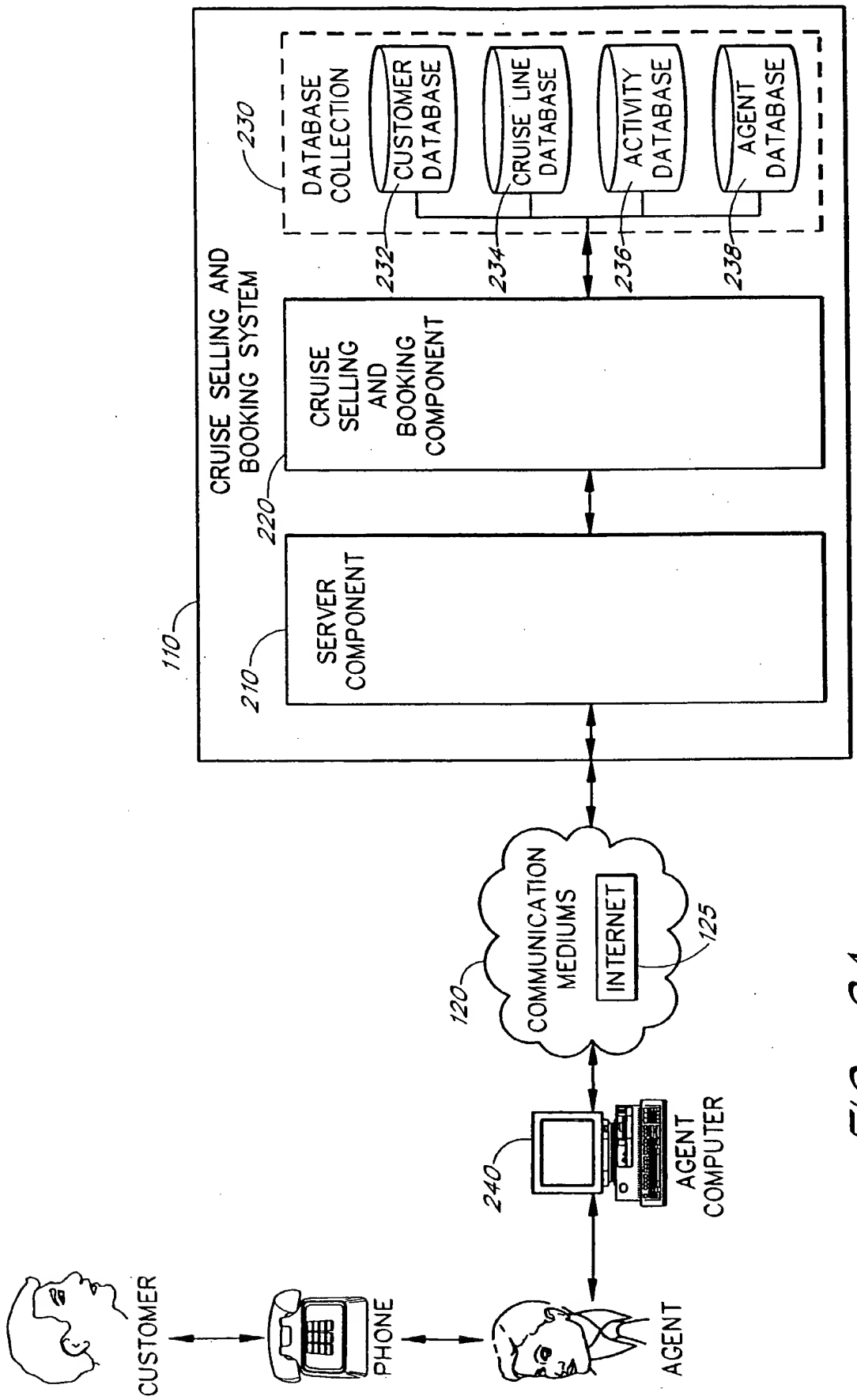
CRUISE SELLING AND BOOKING SYSTEM
120
COMMUNICATION MEDIUMS
INTERNET
125
AGENT
AGENT
CUSTOMER
CUSTOMER

FIG. 1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COMMUNICATION MEDIUMS
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CRUISE SELLING AND BOOKING SYSTEM
SERVER COMPONENT
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CRUISE SELLING AND BOOKING COMPONENT
220
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AGENT DATABASE
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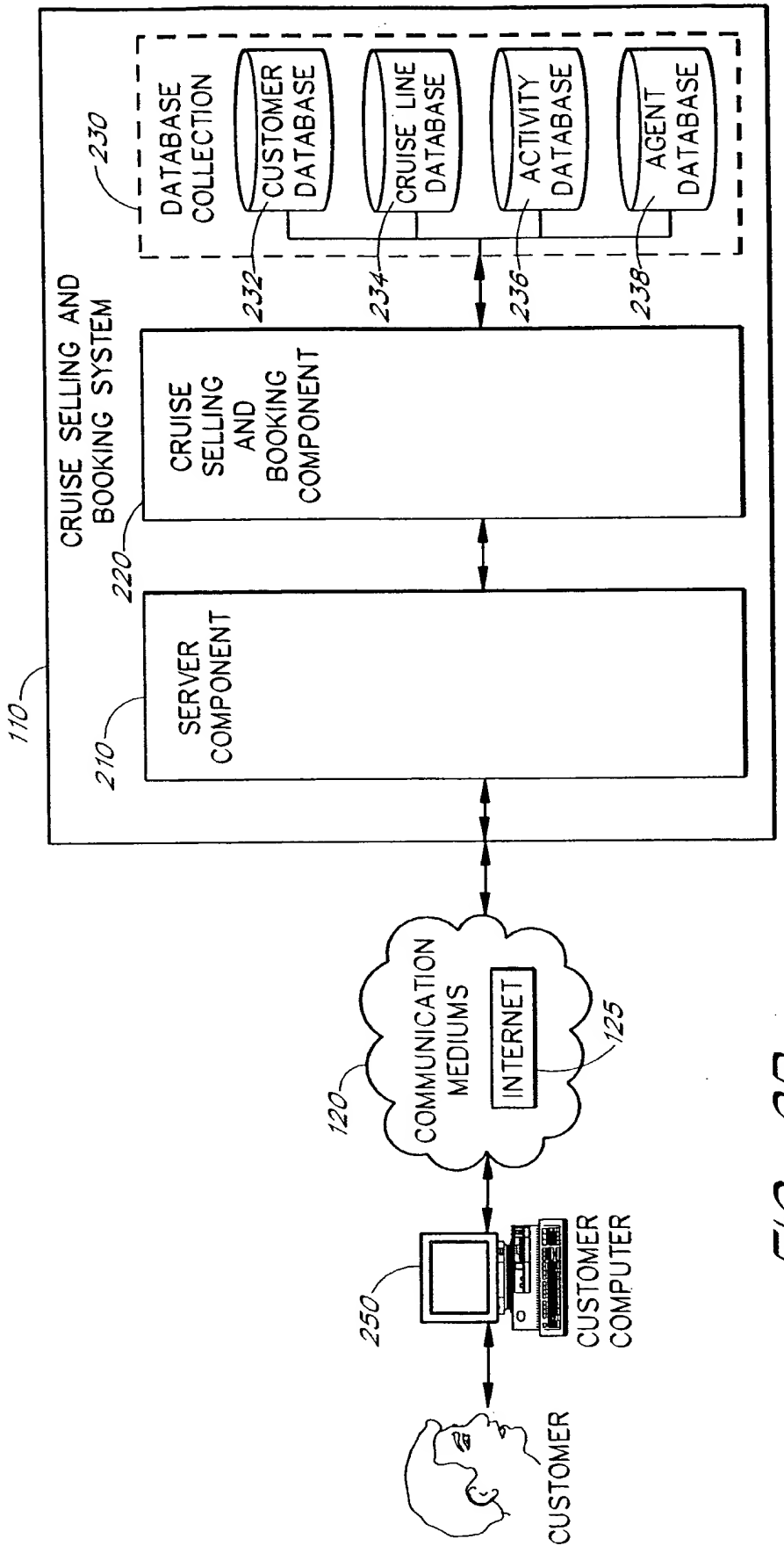
FIG. 2A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CUSTOMER COMPUTER
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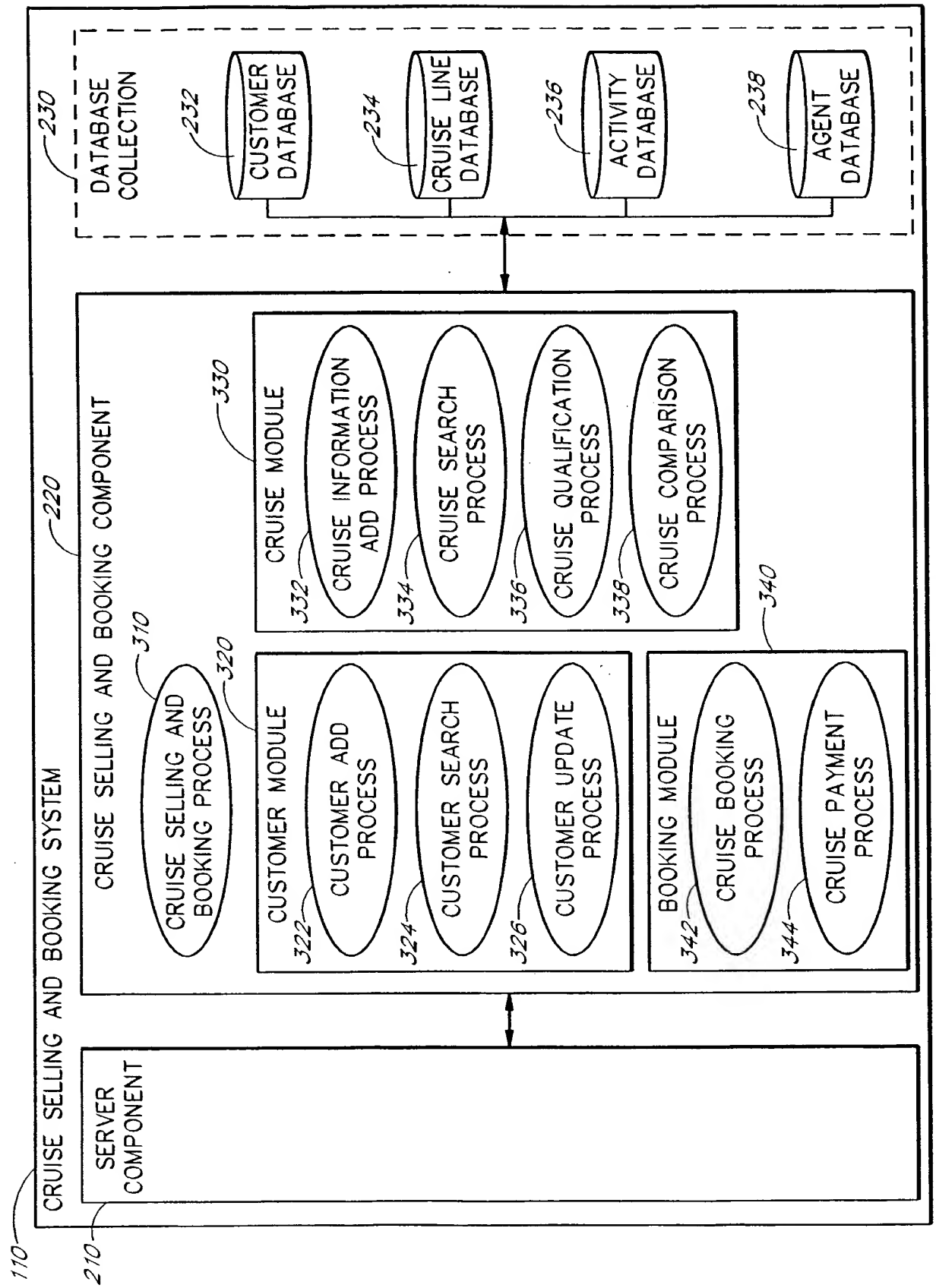
FIG. 2B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CUSTOMER MODULE
322
CUSTOMER ADD PROCESS
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CUSTOMER SEARCH PROCESS
326
CUSTOMER UPDATE PROCESS
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CRUISE MODULE
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CRUISE INFORMATION ADD PROCESS
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CRUISE SEARCH PROCESS
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CRUISE QUALIFICATION PROCESS
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ACTIVITY DATABASE
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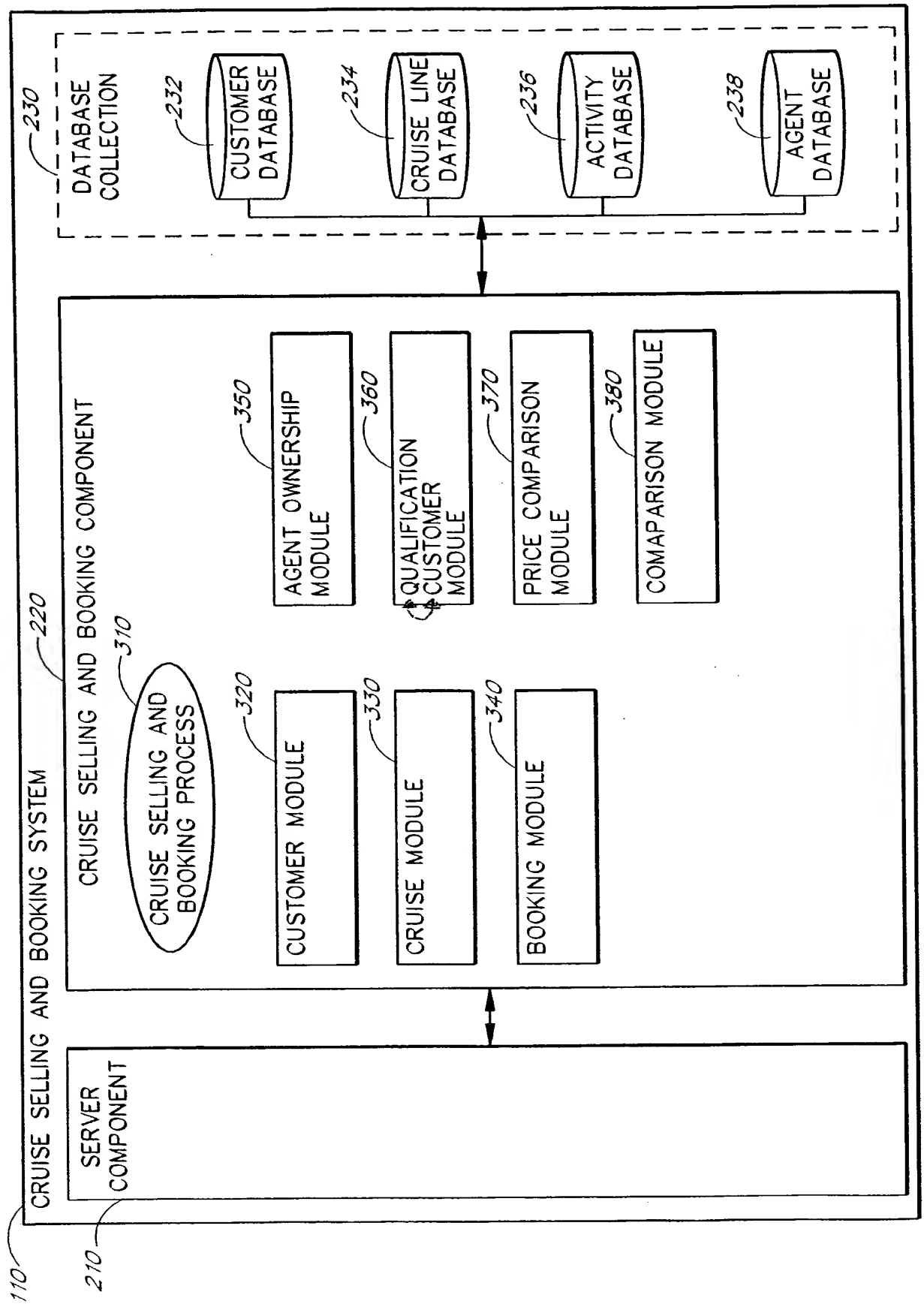
AGENT DATABASE

FIG. 3A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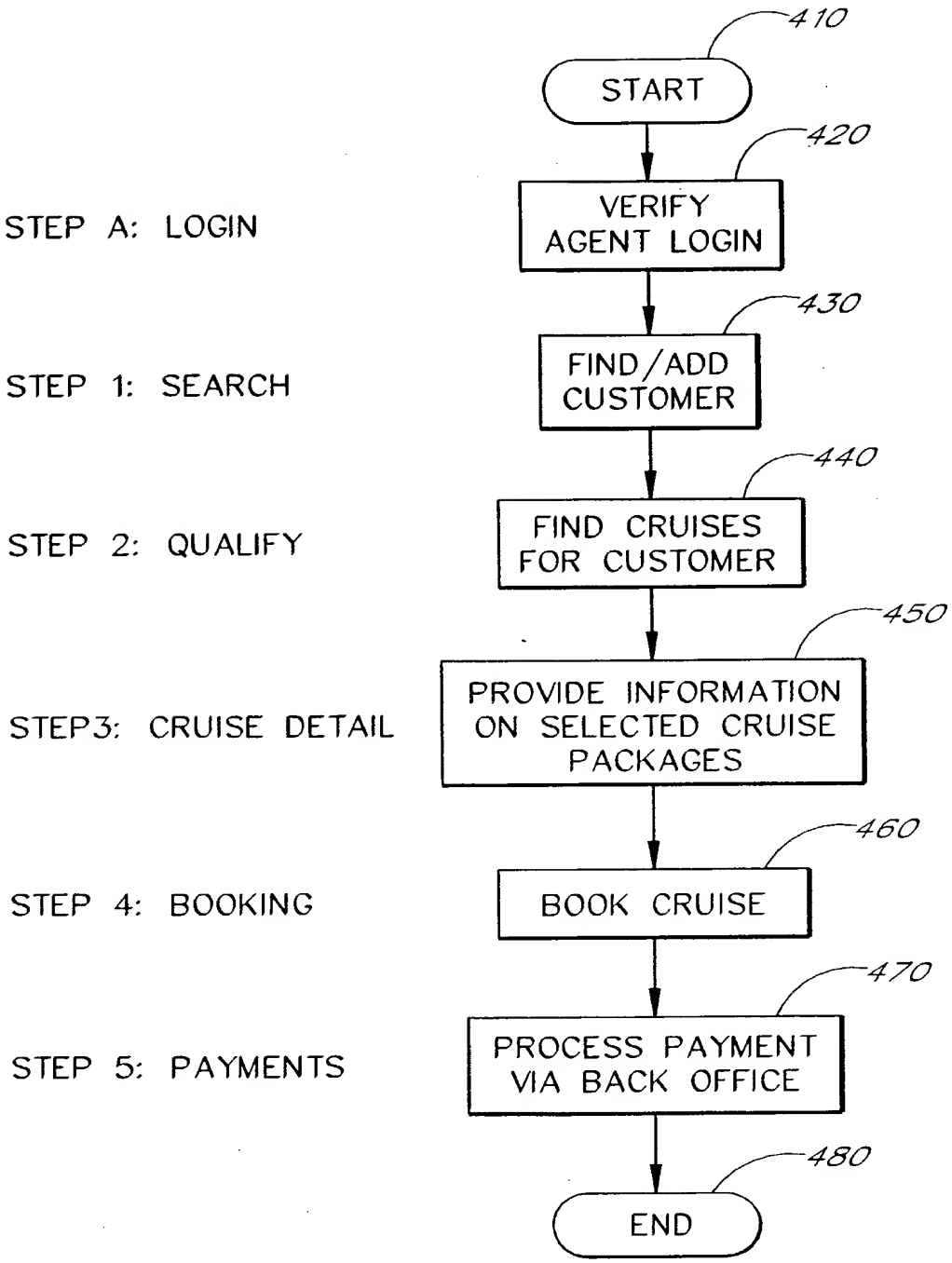
AGENT DATABASE

FIG. 3B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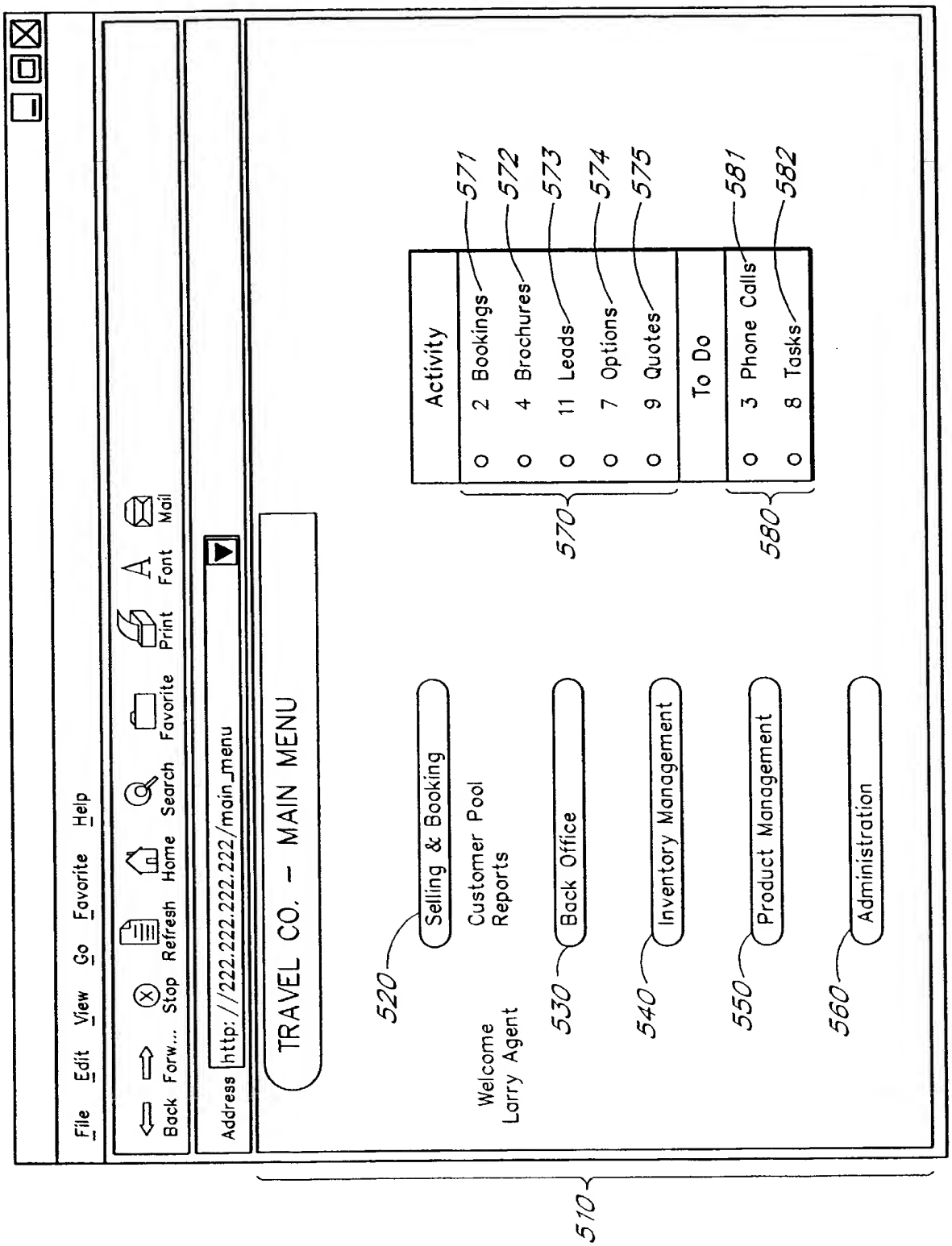
FIND/ADD CUSTOMER
440
FIND CRUISES FOR CUSTOMER
450
PROVIDE INFORMATION ON SELECTED CRUISE PACKAGES
460
BOOK CRUISE
470
PROCESS PAYMENT VIA BACK OFFICE
480
END
STEP A: LOGIN
STEP 1: SEARCH
STEP 2: QUALIFY
STEP3: CRUISE DETAIL
STEP 4: BOOKING
STEP 5: PAYMENTS

FIG. 4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Customer Pool
Reports
Back Office
Inventory Management
Product Management
Administration
Activity
2 Bookings
4 Brochures
11 Leads
7 Options
9 Quotes
To Do
3 Phone Calls
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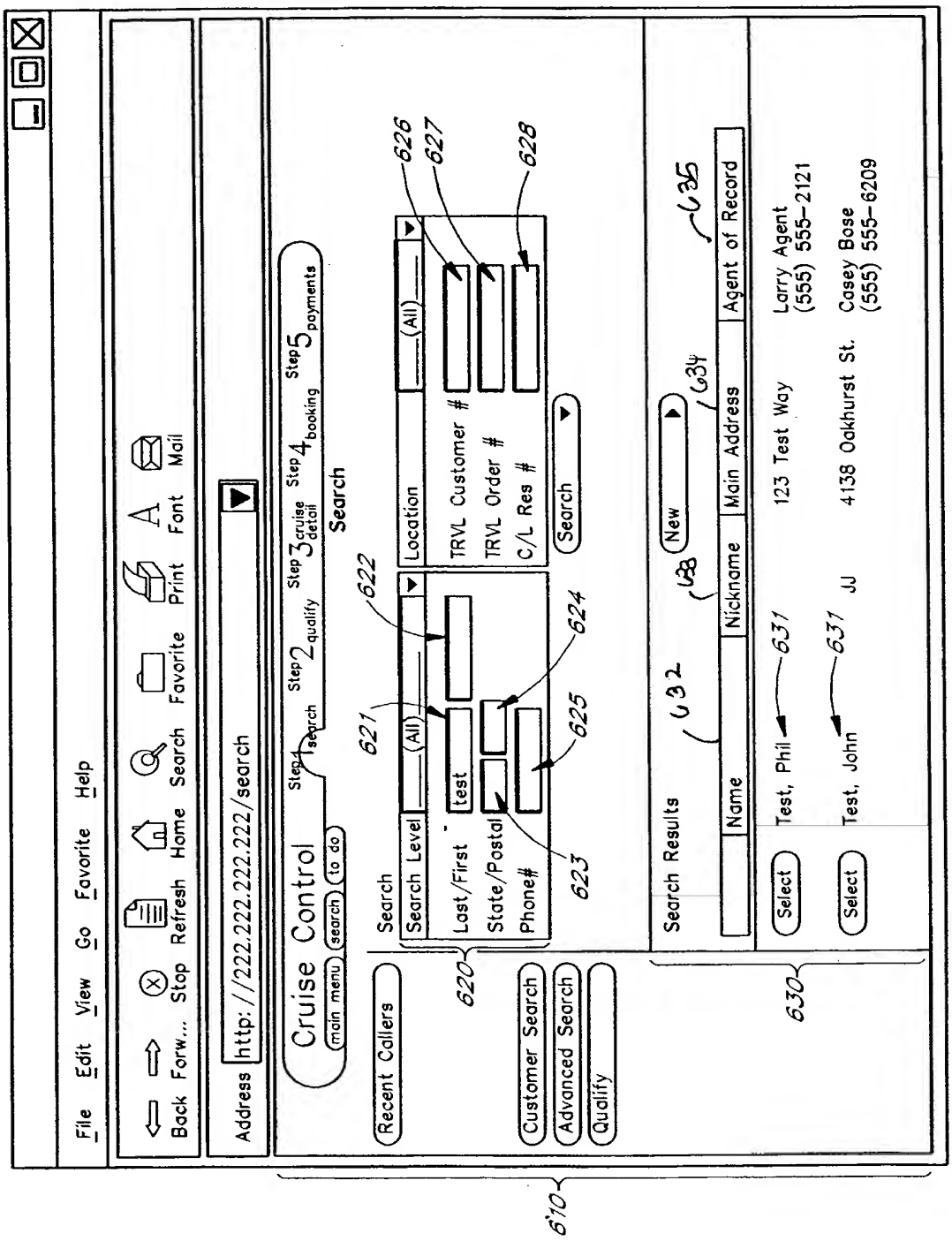
FIG. 5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Qualify
Search
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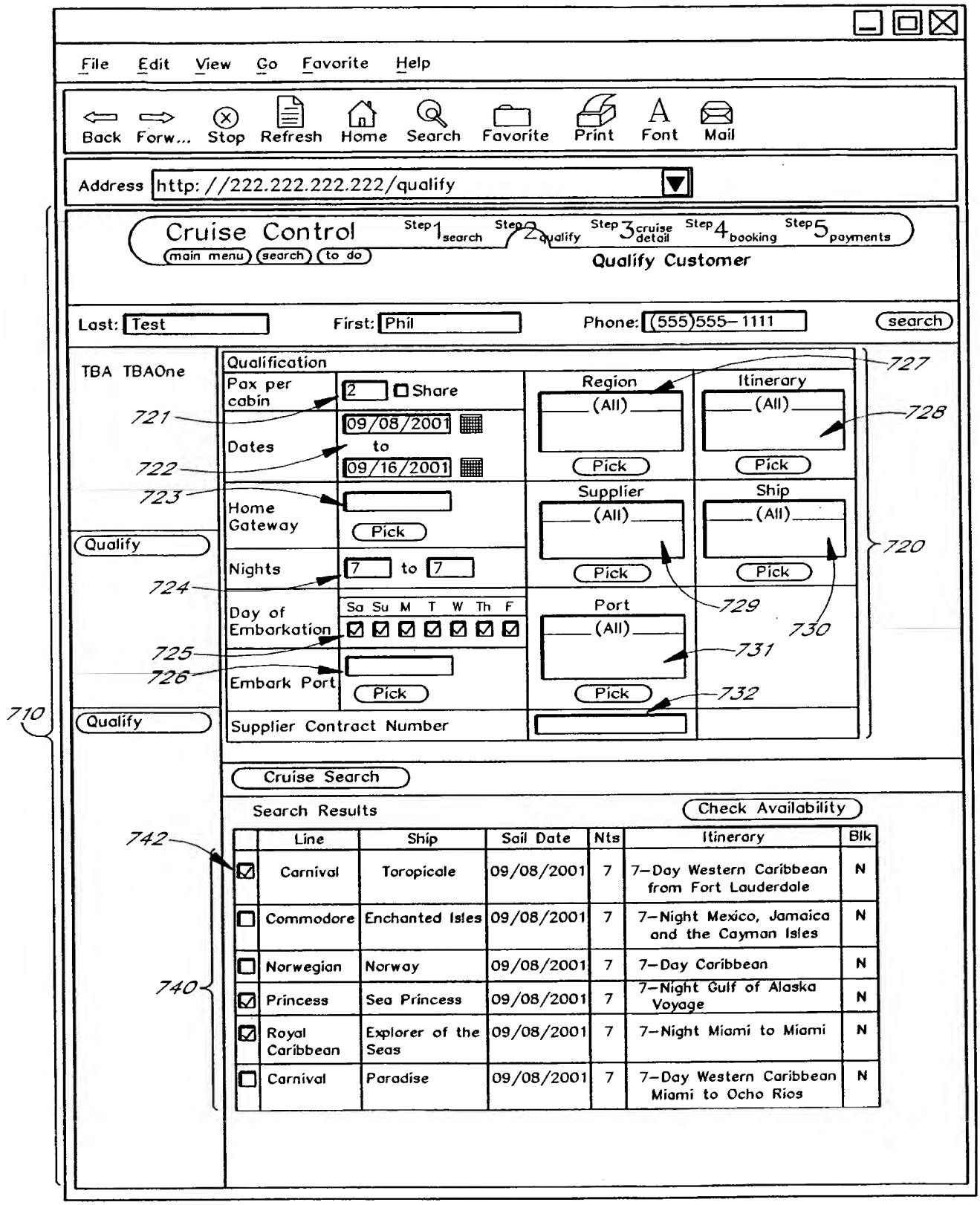
FIG. 6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Cruise Control
main menu search to do
Step 1 search Step 2 qualify Step 3 cruise detail Step 4 booking Step 5 payments
Qualify Customer
Last: Test First: Phil Phone: (555)555-1111 search
TBA TBAOne
Qualify
Qualify
Qualification
Pax per cabin 2 Share
Dates 09/08/2001 to 09/16/2001
Home Gateway Pick
Nights 7 to 7
Day of Embarkation Sa Su M T W Th F
Embark Port Pick
Supplier Contract Number
Region (All) Pick
Itinerary (All) Pick
Supplier (All) Pick
Ship (All) Pick
Port (All) Pick
721
722
723
724
725
726
727
728
729
730
731
732
710
720
Cruise Search
Search Results
Check Availability
742
740
Line Ship Sail Date Nts Itinerary Blk
Carnival Tropicale 09/08/2001 7 7-Day Western Caribbean from Fort Lauderdale N
Commodore Enchanted Isles 09/08/2001 7 7-Night Mexico, Jamaica and the Cayman Isles N
Norwegian Norway 09/08/2001 7 7-Day Caribbean N
Princess Sea Princess 09/08/2001 7 7-Night Gulf of Alaska Voyage N
Royal Caribbean Explorer of the Seas 09/08/2001 7 7-Night Miami to Miami N
Carnival Paradise 09/08/2001 7 7-Day Western Caribbean Miami to Ocho Rios N

FIG. 7

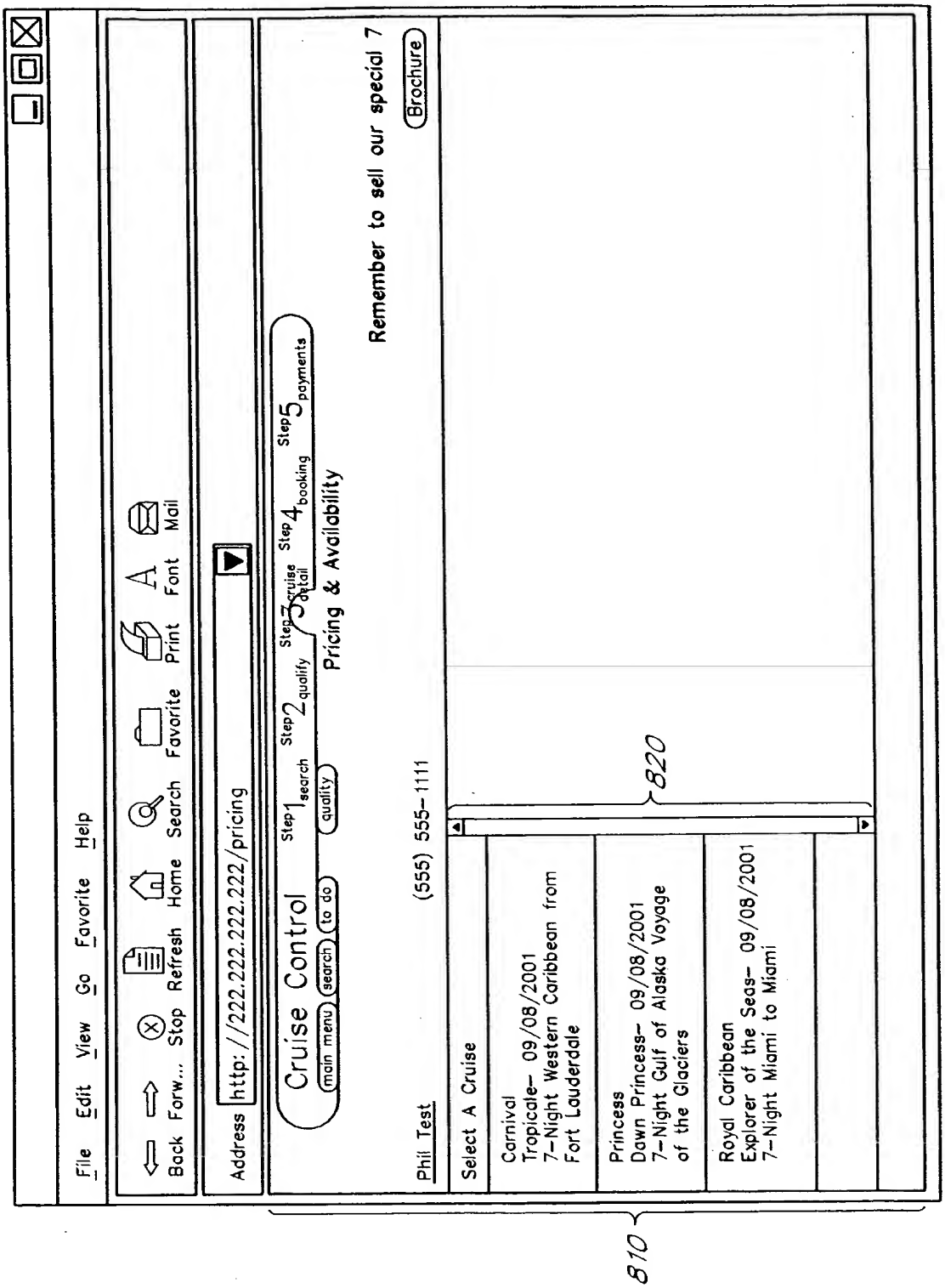

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do quality
Step1 search Step2 qualify Step3 cruise detail Step4 booking Step5 payments
Pricing & Availability
Remember to sell our special 7
Brochure
Phil Test
(555) 555-1111
Select A Cruise
Carnival
Tropicale- 09/08/2001
7-Night Western Caribbean from
Fort Lauderdale
Princess
Dawn Princess- 09/08/2001
7-Night Gulf of Alaska Voyage
of the Glaciers
Royal Caribbean
Explorer of the Seas- 09/08/2001
7-Night Miami to Miami
810
820
830

FIG. 8

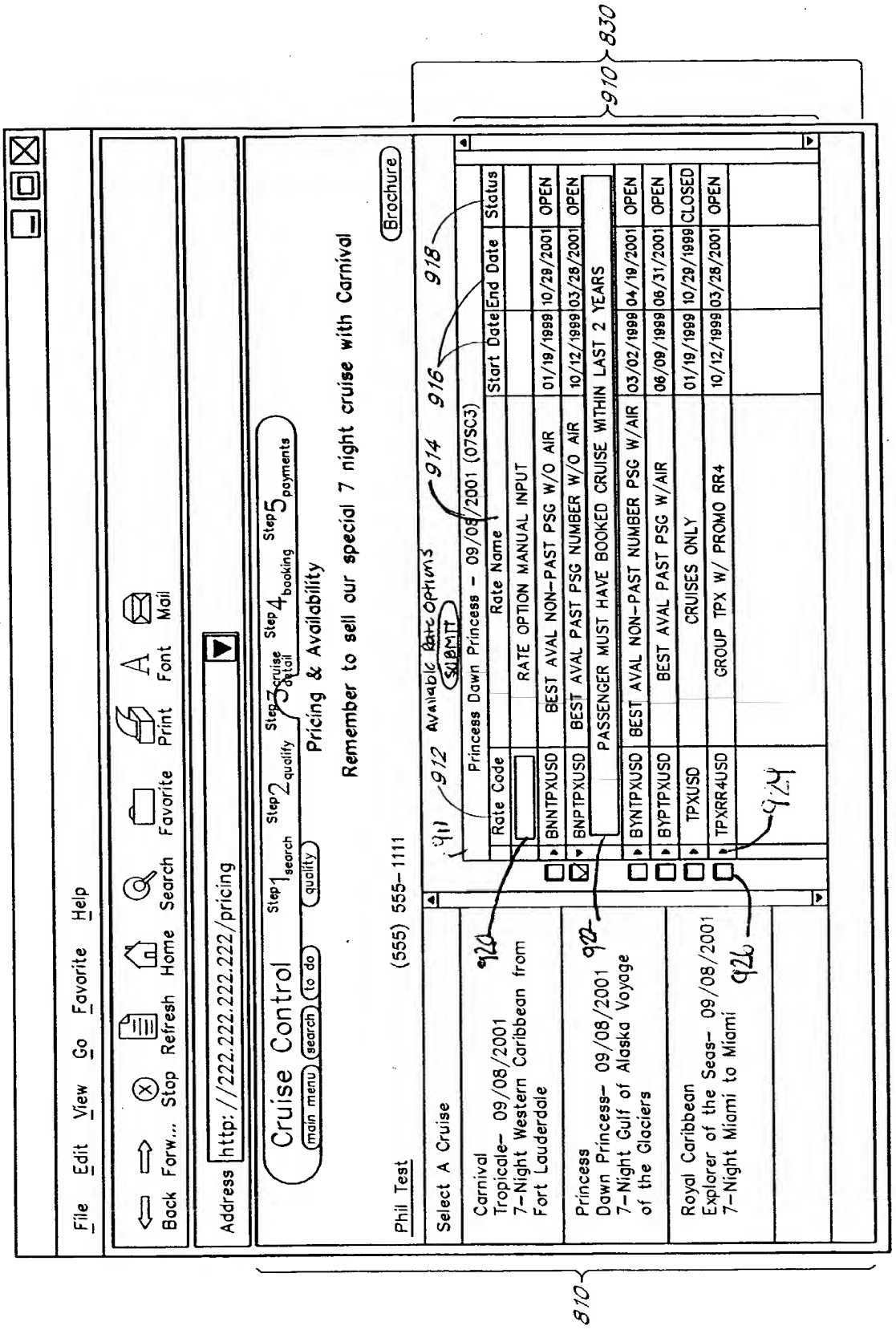

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do qualify
Step1 search
Step2 qualify
Step3 cruise detail
Step4 booking
Step5 payments
Pricing & Availability
Remember to sell our special 7 night cruise with Carnival
Brochure
Phil Test
(555) 555-1111
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
Available Date Options
SUBMIT
Princess Dawn Princess - 09/08/2001 (07SC3)
Rate Code
Rate Name
Start Date
End Date
Status
RATE OPTION MANUAL INPUT
BNNTPXUSD BEST AVAL NON-PAST PSG W/O AIR 01/19/1999 10/29/2001 OPEN
BNPTPXUSD BEST AVAL PAST PSG NUMBER W/O AIR 10/12/1999 03/28/2001 OPEN
PASSENGER MUST HAVE BOOKED CRUISE WITHIN LAST 2 YEARS
BYNTPXUSD BEST AVAL NON-PAST NUMBER PSG W/AIR 03/02/1999 04/19/2001 OPEN
BYPTPXUSD BEST AVAL PAST PSG W/AIR 06/09/1999 06/31/2001 OPEN
TPXUSD CRUISES ONLY 01/19/1999 10/29/1999 CLOSED
TPXRR4USD GROUP TPX W/ PROMO RR4 10/12/1999 03/28/2001 OPEN
810
830
910
911
912
914
916
918
920
922
924

FIG. 9

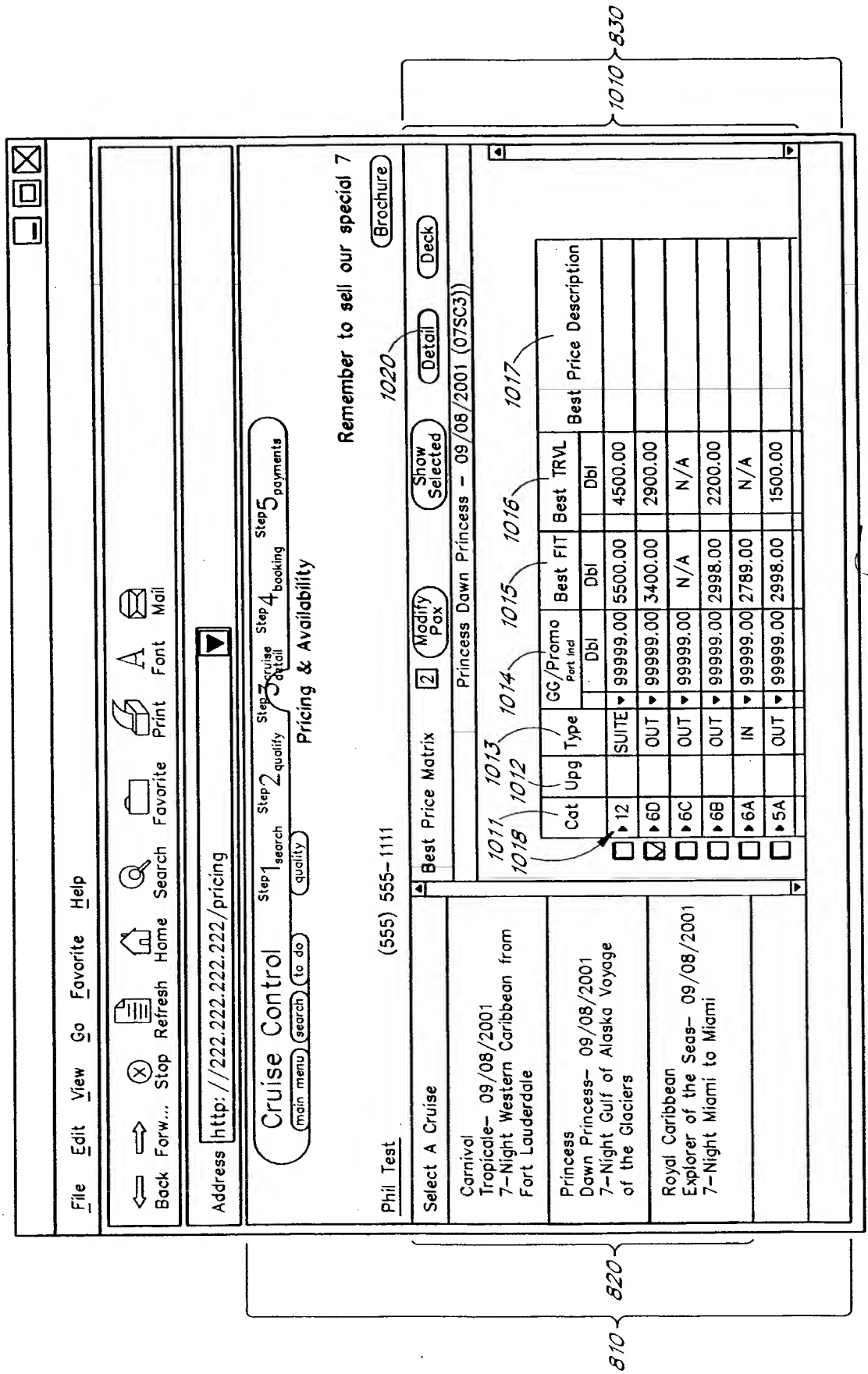

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do quality
Step 1 search
Step 2 qualify
Step 3 cruise detail
Step 4 booking
Step 5 payments
Pricing & Availability
Remember to sell our special 7
Brochure
Phil Test
(555) 555-1111
Select A Cruise
Best Price Matrix
2
Modify Pax
Show Selected
Detail
Deck
Princess Dawn Princess – 09/08/2001 (07SC3))
Carnival Tropicale– 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess– 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas– 09/08/2001 7-Night Miami to Miami
Cat
Upg
Type
GG/Promo Port Incl
Best FIT
Best TRVL
Best Price Description
Dbl
Dbl
Dbl
12
6D
6C
6B
6A
5A
SUITE
OUT
OUT
OUT
IN
OUT
99999.00
99999.00
99999.00
99999.00
99999.00
99999.00
5500.00
3400.00
N/A
2998.00
2789.00
2998.00
4500.00
2900.00
N/A
2200.00
N/A
1500.00
1011
1012
1013
1014
1015
1016
1017
1018
1020
810
820
830
1010

FIG. 10

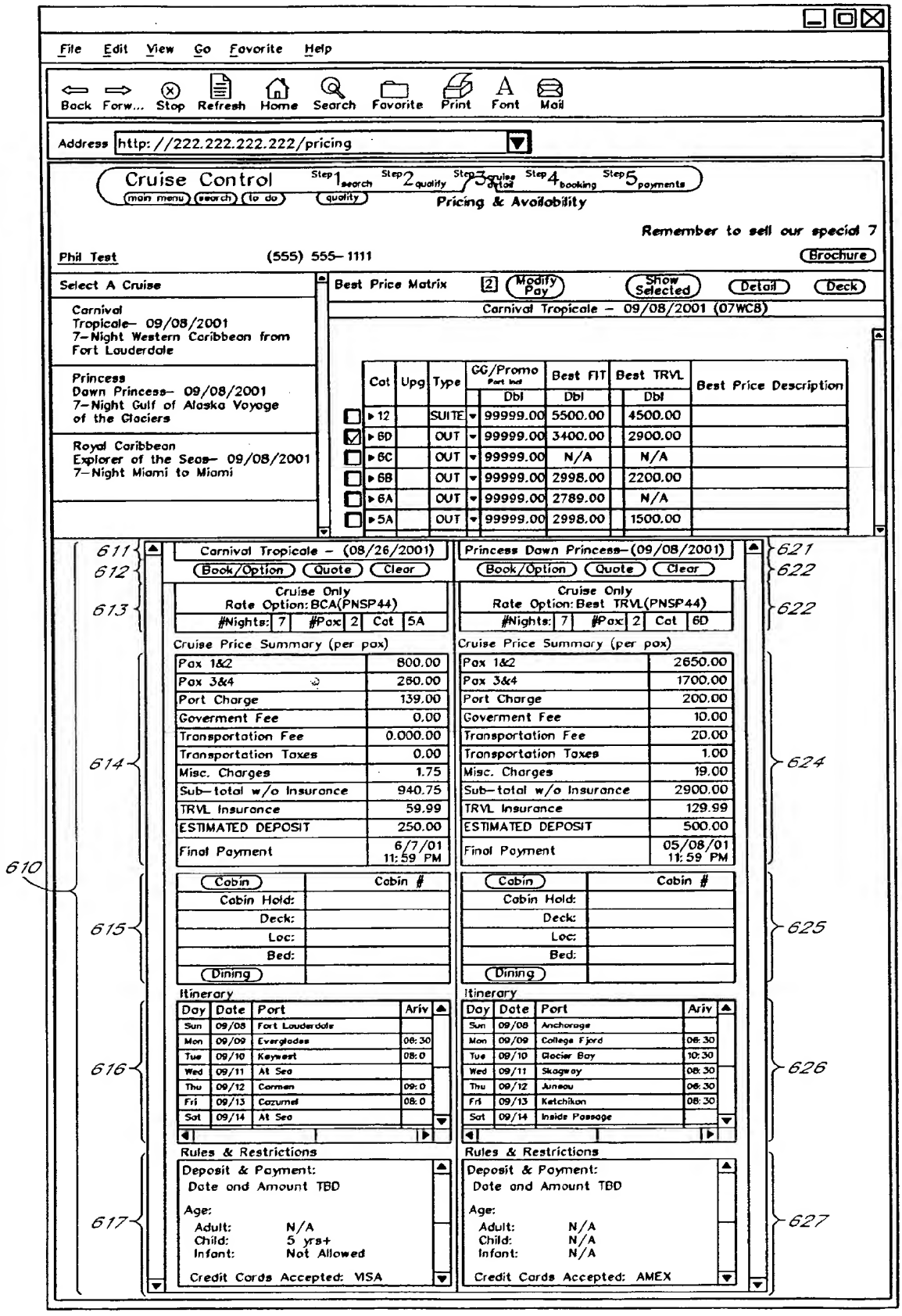

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do
Step 1 search Step 2 quality Step 3 cruise detail Step 4 booking Step 5 payments
Pricing & Availability
Remember to sell our special 7
Phil Test (555) 555-1111
Brochure
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Down Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
Best Price Matrix
Modify Pay
Show Selected
Detail
Deck
Carnival Tropicale - 09/08/2001 (07WC8)
Cat Upg Type CC/Promo Best FIT Best TRVL Best Price Description
Dbl Dbl Dbl
12 SUITE 99999.00 5500.00 4500.00
6D OUT 99999.00 3400.00 2900.00
6C OUT 99999.00 N/A N/A
6B OUT 99999.00 2998.00 2200.00
6A OUT 99999.00 2789.00 N/A
5A OUT 99999.00 2998.00 1500.00
611
612
613
614
615
616
617
610
Carnival Tropicale - (08/26/2001)
Book/Option Quote Clear
Cruise Only
Rate Option: BCA(PNSP44)
#Nights: 7 #Pax: 2 Cat 5A
Cruise Price Summary (per pax)
Pax 1&2 800.00
Pax 3&4 280.00
Port Charge 139.00
Goverment Fee 0.00
Transportation Fee 0.000.00
Transportation Taxes 0.00
Misc. Charges 1.75
Sub-total w/o Insurance 940.75
TRVL Insurance 59.99
ESTIMATED DEPOSIT 250.00
Final Payment 6/7/01 11:59 PM
Cabin Cabin #
Cabin Hold:
Deck:
Loc:
Bed:
Dining
Itinerary
Day Date Port Ariv
Sun 09/08 Fort Lauderdale
Mon 09/09 Everglades 08:30
Tue 09/10 Keywest 08:0
Wed 09/11 At Sea
Thu 09/12 Carmen 09:0
Fri 09/13 Cozumel 08:0
Sat 09/14 At Sea
Rules & Restrictions
Deposit & Payment:
Date and Amount TBD
Age:
Adult: N/A
Child: 5 yrs+
Infant: Not Allowed
Credit Cards Accepted: VISA
621
622
622
624
625
626
627
Princess Down Princess-(09/08/2001)
Book/Option Quote Clear
Cruise Only
Rate Option: Best TRVL(PNSP44)
#Nights: 7 #Pax: 2 Cat 6D
Cruise Price Summary (per pax)
Pax 1&2 2650.00
Pax 3&4 1700.00
Port Charge 200.00
Goverment Fee 10.00
Transportation Fee 20.00
Transportation Taxes 1.00
Misc. Charges 19.00
Sub-total w/o Insurance 2900.00
TRVL Insurance 129.99
ESTIMATED DEPOSIT 500.00
Final Payment 05/08/01 11:59 PM
Cabin Cabin #
Cabin Hold:
Deck:
Loc:
Bed:
Dining
Itinerary
Day Date Port Ariv
Sun 09/08 Anchorage
Mon 09/09 College Fjord 08:30
Tue 09/10 Glacier Bay 10:30
Wed 09/11 Skagway 08:30
Thu 09/12 Juneau 06:30
Fri 09/13 Ketchikan 08:30
Sat 09/14 Inside Passage
Rules & Restrictions
Deposit & Payment:
Date and Amount TBD
Age:
Adult: N/A
Child: N/A
Infant: N/A
Credit Cards Accepted: AMEX

FIG. 6A
11

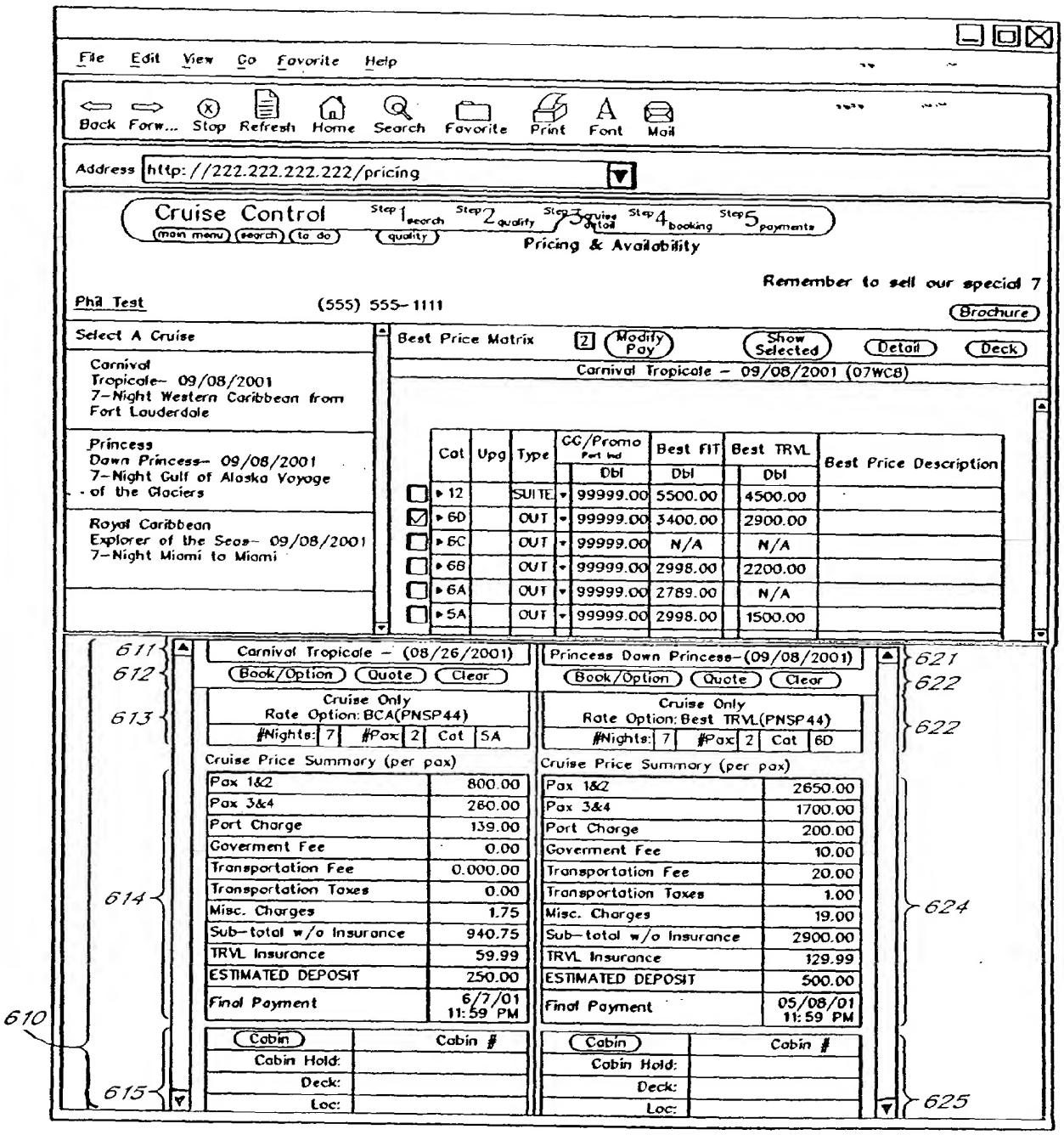

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do
Step 1 search Step 2 quality Step 3 price total Step 4 booking Step 5 payments
Pricing & Availability
Remember to sell our special 7
Phil Test (555) 555-1111
Brochure
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
Best Price Matrix
Modify Pay
Show Selected
Detail
Deck
Carnival Tropicale - 09/08/2001 (07WC8)
Cat Upg Type CC/Promo Port Ind Dbl Best FIT Dbl Best TRVL Dbl Best Price Description
12 SUITE 99999.00 5500.00 4500.00
6D OUT 99999.00 3400.00 2900.00
6C OUT 99999.00 N/A N/A
6B OUT 99999.00 2998.00 2200.00
6A OUT 99999.00 2789.00 N/A
5A OUT 99999.00 2998.00 1500.00
611
612
613
614
615
610
Carnival Tropicale - (08/26/2001)
Book/Option Quote Clear
Cruise Only
Rate Option: BCA(PNSP44)
#Nights: 7 #Pax: 2 Cat 5A
Cruise Price Summary (per pax)
Pax 1&2 800.00
Pax 3&4 280.00
Port Charge 139.00
Goverment Fee 0.00
Transportation Fee 0.000.00
Transportation Taxes 0.00
Misc. Charges 1.75
Sub-total w/o Insurance 940.75
TRVL Insurance 59.99
ESTIMATED DEPOSIT 250.00
Final Payment 6/7/01 11:59 PM
Cabin Cabin #
Cabin Hold:
Deck:
Loc:
621
622
622
624
625
Princess Down Princess-(09/08/2001)
Book/Option Quote Clear
Cruise Only
Rate Option: Best TRVL(PNSP44)
#Nights: 7 #Pax: 2 Cat 6D
Cruise Price Summary (per pax)
Pax 1&2 2650.00
Pax 3&4 1700.00
Port Charge 200.00
Goverment Fee 10.00
Transportation Fee 20.00
Transportation Taxes 1.00
Misc. Charges 19.00
Sub-total w/o Insurance 2900.00
TRVL Insurance 129.99
ESTIMATED DEPOSIT 500.00
Final Payment 05/08/01 11:59 PM
Cabin Cabin #
Cabin Hold:
Deck:
Loc:

FIG. 6B

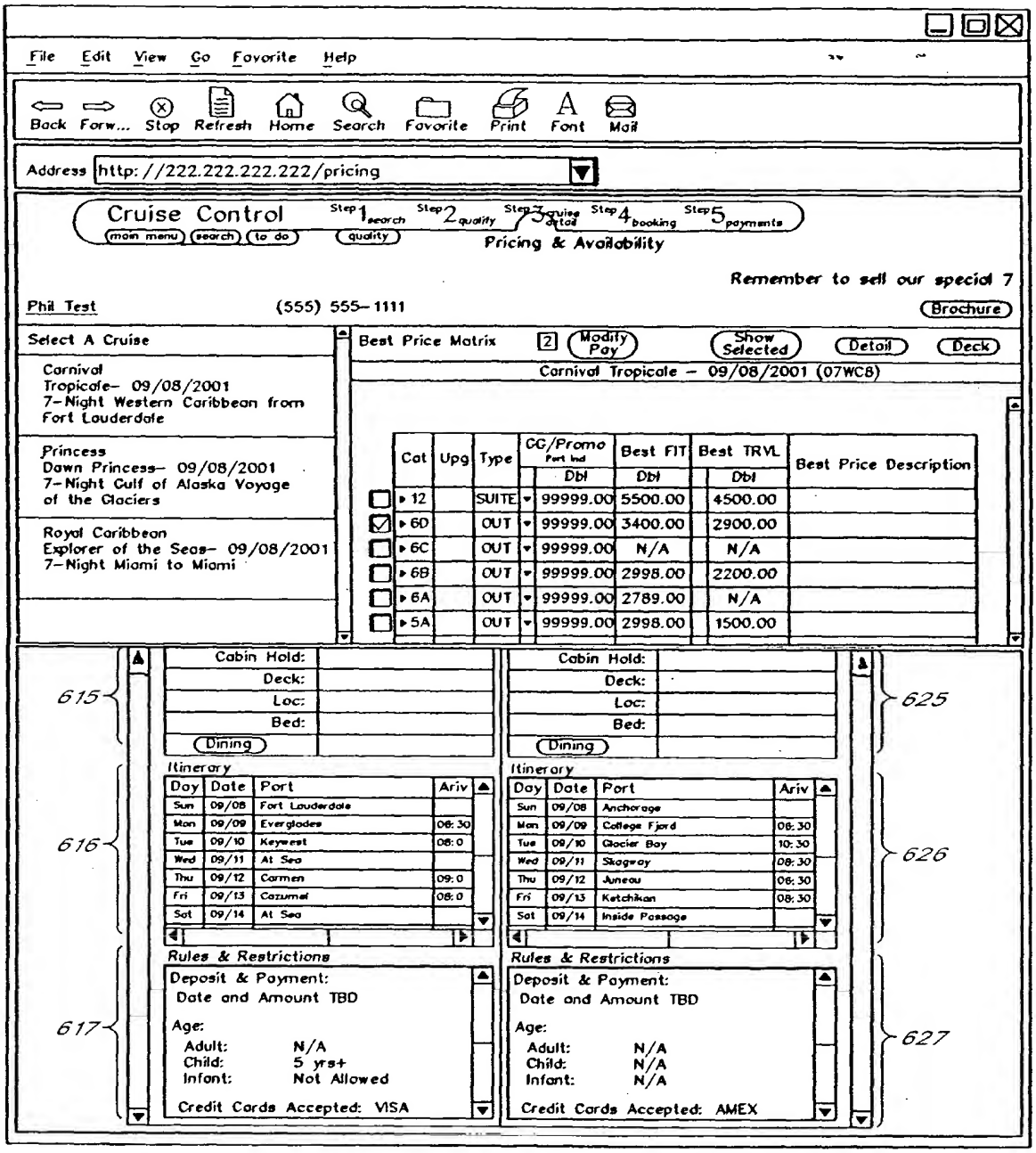
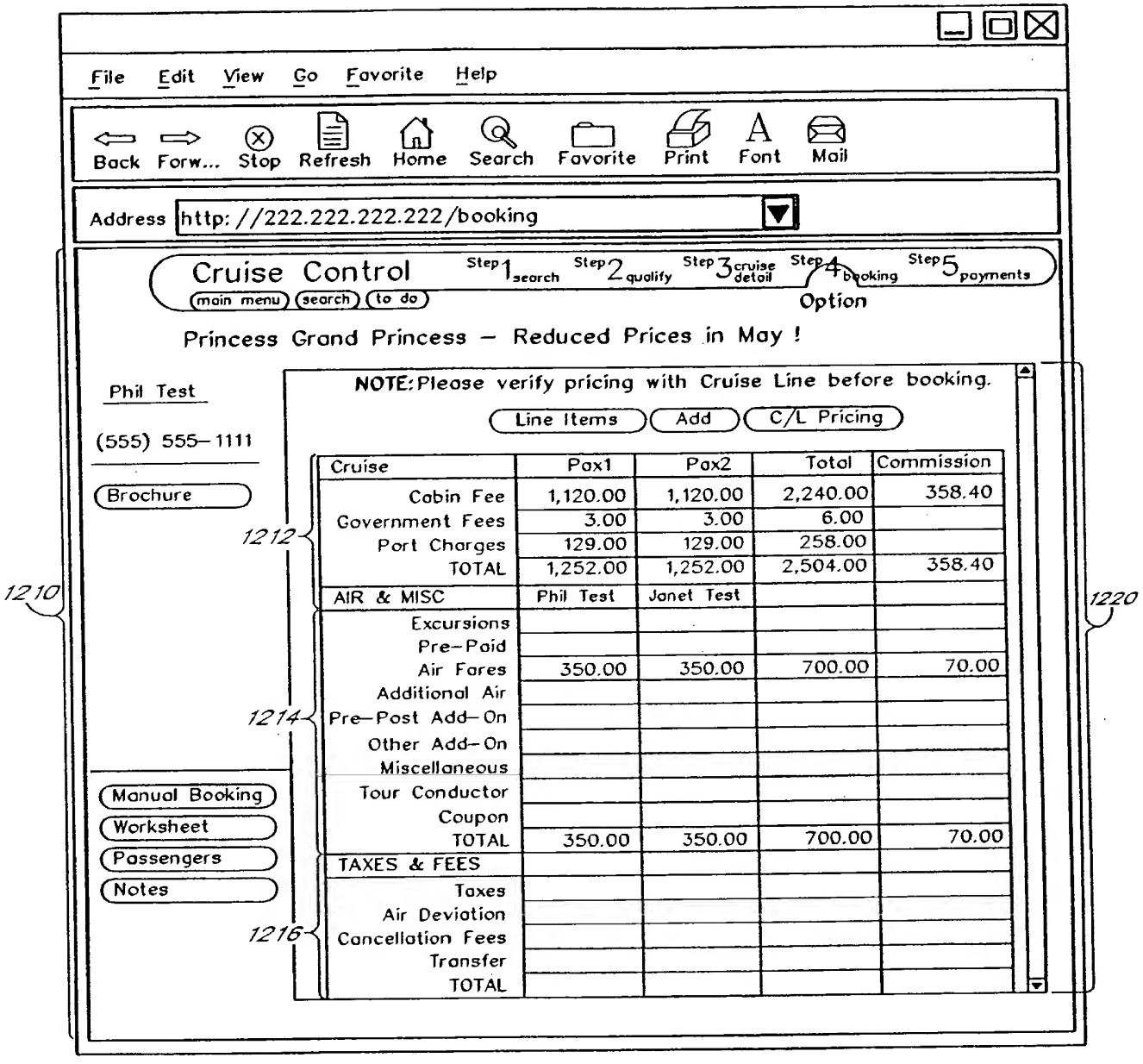

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
Step 1 search Step 2 qualify Step 3 quote detail Step 4 booking Step 5 payments
main menu search to do qualify
Pricing & Availability
Remember to sell our special 7
Phil Test (555) 555-1111
Brochure
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
Best Price Matrix
Modify Pay
Show Selected
Detail
Deck
Carnival Tropicale - 09/08/2001 (07WC8)
Cat Upg Type CG/Promo Best FIT Best TRVL Best Price Description
Dbl Dbl Dbl
12 SUITE 99999.00 5500.00 4500.00
6D OUT 99999.00 3400.00 2900.00
6C OUT 99999.00 N/A N/A
6B OUT 99999.00 2998.00 2200.00
6A OUT 99999.00 2789.00 N/A
5A OUT 99999.00 2998.00 1500.00
615
Cabin Hold:
Deck:
Loc:
Bed:
Dining
625
616
Itinerary
Day Date Port Ariv
Sun 09/08 Fort Lauderdale
Mon 09/09 Everglades 08:30
Tue 09/10 Keywest 08:0
Wed 09/11 At Sea
Thu 09/12 Carmen 09:0
Fri 09/13 Cozumel 08:0
Sat 09/14 At Sea
Sun 09/08 Anchorage
Mon 09/09 College Fjord 08:30
Tue 09/10 Glacier Bay 10:30
Wed 09/11 Skagway 08:30
Thu 09/12 Juneau 08:30
Fri 09/13 Ketchikan 08:30
Sat 09/14 Inside Passage
626
617
Rules & Restrictions
Deposit & Payment:
Date and Amount TBD
Age:
Adult: N/A
Child: 5 yrs+
Infant: Not Allowed
Credit Cards Accepted: VISA
Adult: N/A
Child: N/A
Infant: N/A
Credit Cards Accepted: AMEX
627

FIG. 6B
11C



Cruise	Pax1	Pax2	Total	Commission
Cabin Fee	1,120.00	1,120.00	2,240.00	358.40
Government Fees	3.00	3.00	6.00	
Port Charges	129.00	129.00	258.00	
TOTAL	1,252.00	1,252.00	2,504.00	358.40
AIR & MISC	Phil Test	Janet Test		
Excursions				
Pre-Paid				
Air Fares	350.00	350.00	700.00	70.00
Additional Air				
Pre-Post Add-On				
Other Add-On				
Miscellaneous				
Tour Conductor				
Coupon				
TOTAL	350.00	350.00	700.00	70.00
TAXES & FEES				
Taxes				
Air Deviation				
Cancellation Fees				
Transfer				
TOTAL				

FIG. 12

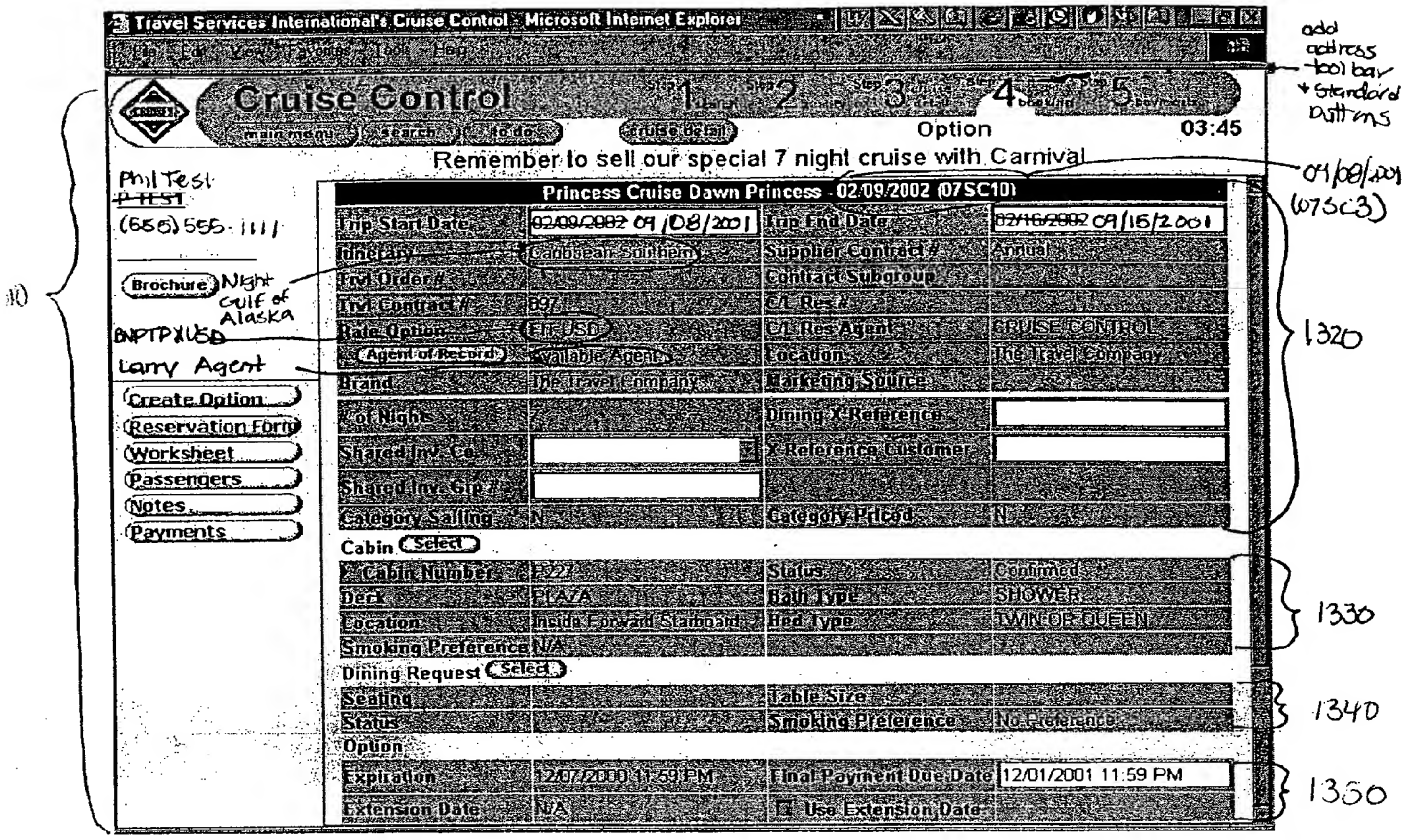

Travel Services International's Cruise Control - Microsoft Internet Explorer
add address tool bar + Standard Buttons
Cruise Control
Option
03:45
Remember to sell our special 7 night cruise with Carnival
Phil Test
PHIST
(555) 555-1111
Brochure
Night Gulf of Alaska
BNPTPXUSD
Larry Agent
Create Option
Reservation Form
Worksheet
Passengers
Notes
Payments
Princess Cruise Dawn Princess - 02/09/2002 (07SC10)
01/09/2001 (07SC3)
Trip Start Date
09/08/2001
Trip End Date
09/15/2001
Itinerary
Caribbean Southern
Supplier Contract #
Annual
Fol Order #
Contract Subgroup
Tvl Contract #
897
CA Res #
Rate Option
FF-USD
CA Res Agent
CRUISE CONTROL
Agent of Record
Available Agents
Location
The Travel Company
Brand
The Travel Company
Marketing Source
# of Nights
Dining X-Reference
Shared Inv Co
X-Reference Customer
Shared Inv Sip #
Category Sailing
N
Category Priced
N
1320
Cabin
Select
Cabin Number
227
Status
Confirmed
Deck
PLAZA
Bath Type
SHOWER
Location
Inside Forward Stairwell
Bed Type
TWIN OR QUEEN
Smoking Preference
N/A
1330
Dining Request
Select
Seating
Table Size
Status
Smoking Preference
No Preference
1340
Option
Expiration
12/07/2000 11:59 PM
Final Payment Due Date
12/01/2001 11:59 PM
Extension Date
N/A
Use Extension Date
1350

FIG. 13

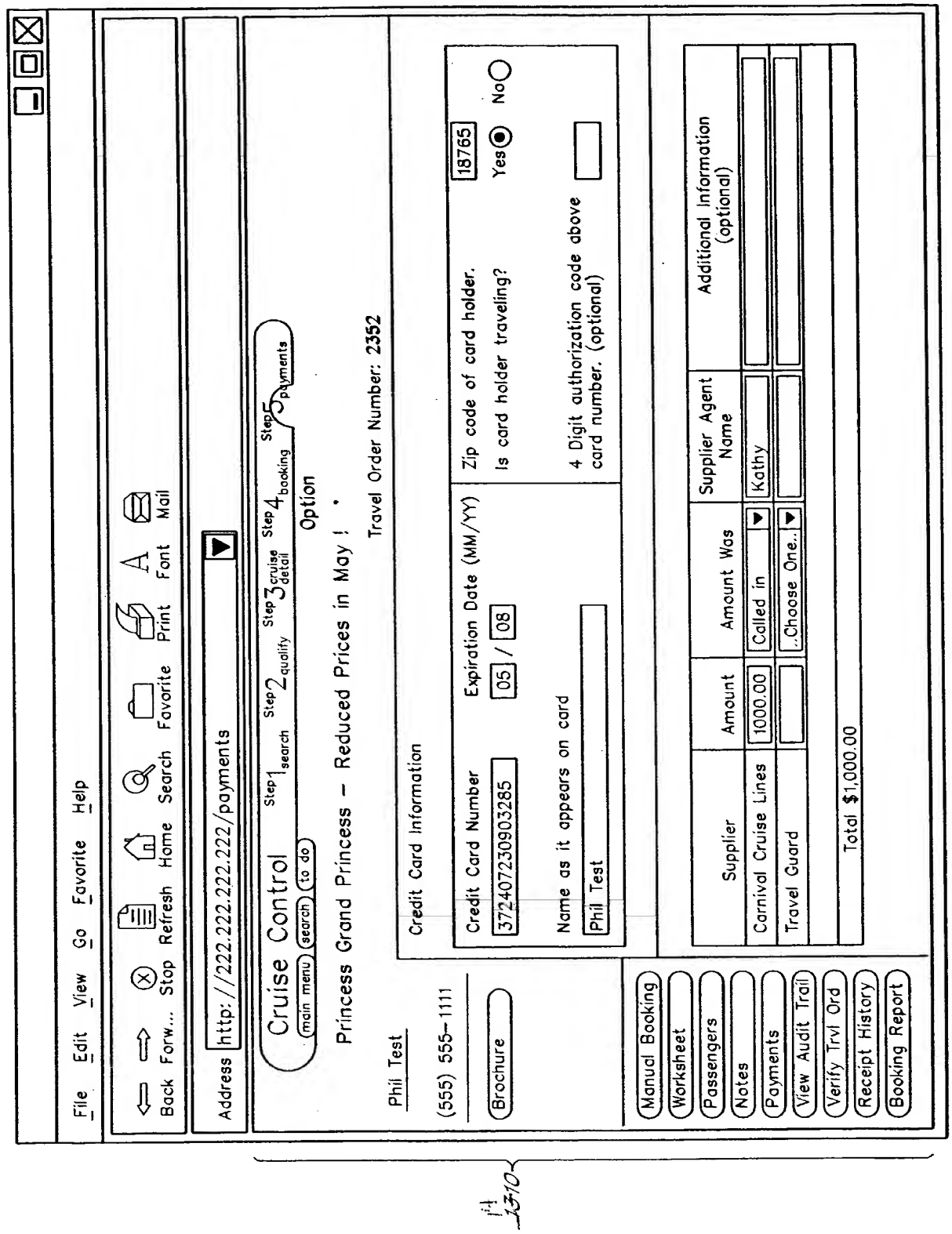

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/payments
Cruise Control
main menu search to do
Step1 search Step2 qualify Step3 cruise detail Step4 booking Step5 payments
Option
Princess Grand Princess - Reduced Prices in May !
Travel Order Number: 2352
Phil Test
(555) 555-1111
Brochure
Credit Card Information
Credit Card Number
3724072309O3285
Expiration Date (MM/YY)
05 / 08
Zip code of card holder.
18765
Is card holder traveling?
Yes No
Name as it appears on card
Phil Test
4 Digit authorization code above card number. (optional)
Supplier
Amount
Amount Was
Supplier Agent Name
Additional Information (optional)
Carnival Cruise Lines
1000.00
Called in
Kathy
Travel Guard
.Choose One..
Total $1,000.00
Manual Booking
Worksheet
Passengers
Notes
Payments
View Audit Trail
Verify Trvl Ord
Receipt History
Booking Report
14 1520
14 1530
14 1510

FIG. 13 14

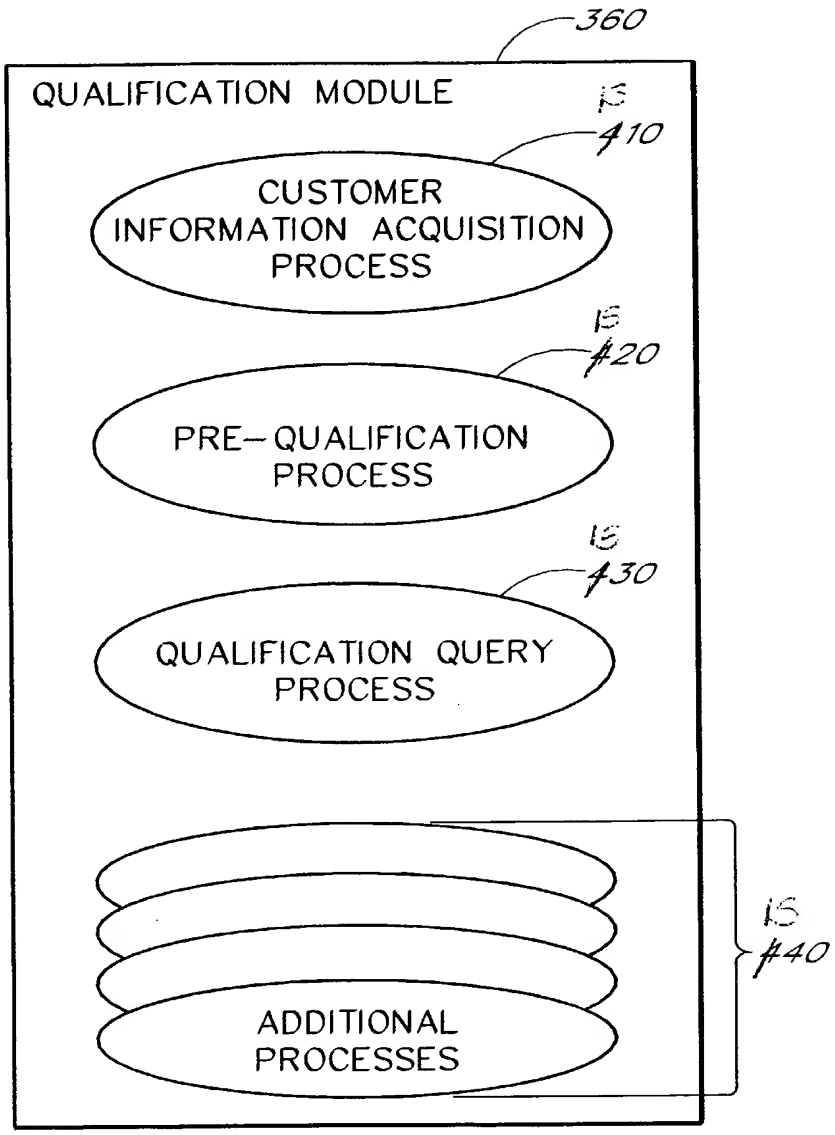

360
QUALIFICATION MODULE
15
410
CUSTOMER INFORMATION ACQUISITION PROCESS
15
420
PRE-QUALIFICATION PROCESS
15
430
QUALIFICATION QUERY PROCESS
ADDITIONAL PROCESSES
15
440

FIG. 4 15

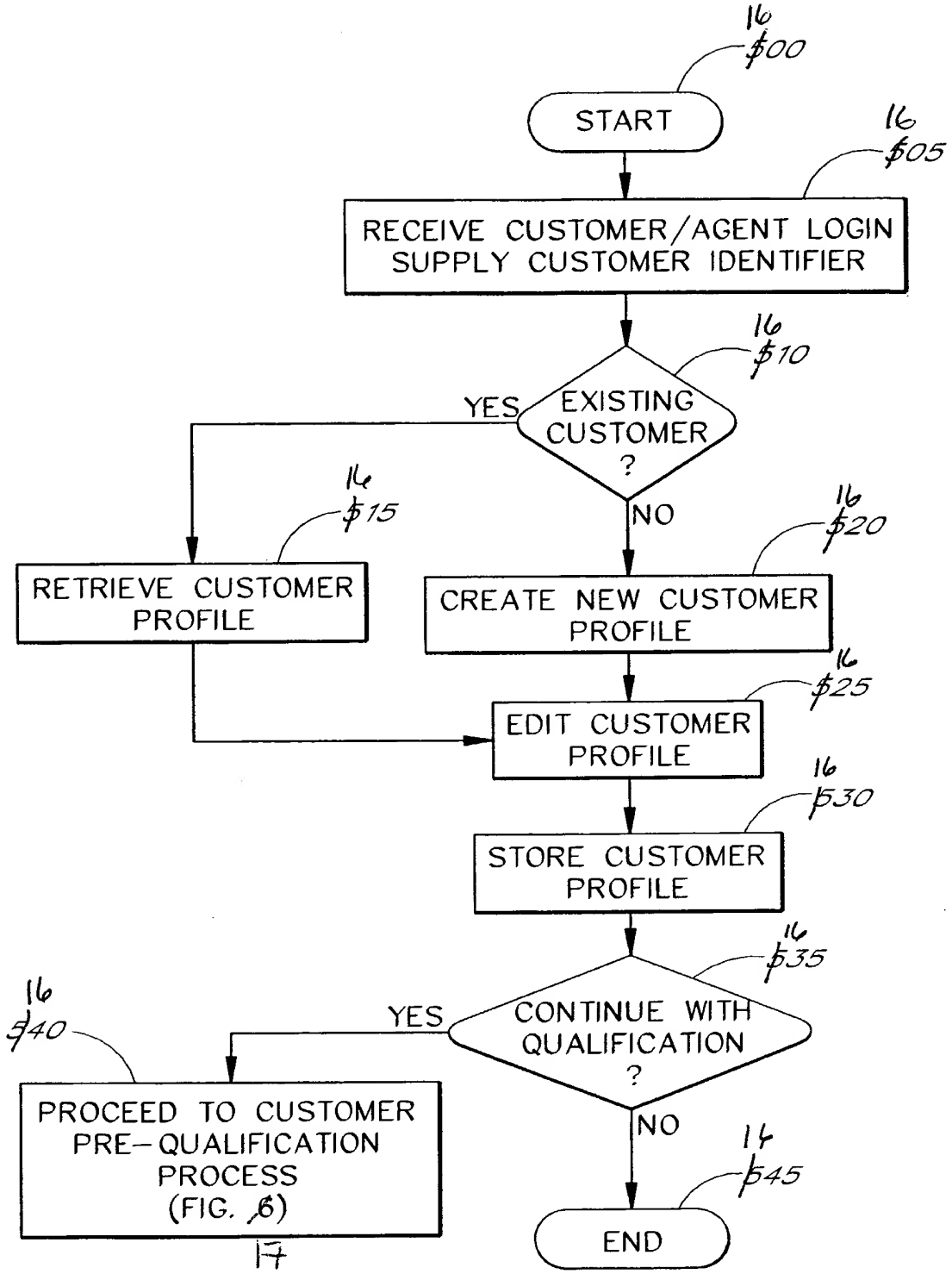

16
300
START
16
305
RECEIVE CUSTOMER/AGENT LOGIN
SUPPLY CUSTOMER IDENTIFIER
16
310
EXISTING CUSTOMER ?
YES
NO
16
315
RETRIEVE CUSTOMER PROFILE
16
320
CREATE NEW CUSTOMER PROFILE
16
325
EDIT CUSTOMER PROFILE
16
330
STORE CUSTOMER PROFILE
16
335
CONTINUE WITH QUALIFICATION ?
YES
NO
16
340
PROCEED TO CUSTOMER PRE-QUALIFICATION PROCESS (FIG. 6)
17
14
345
END

FIG. 16

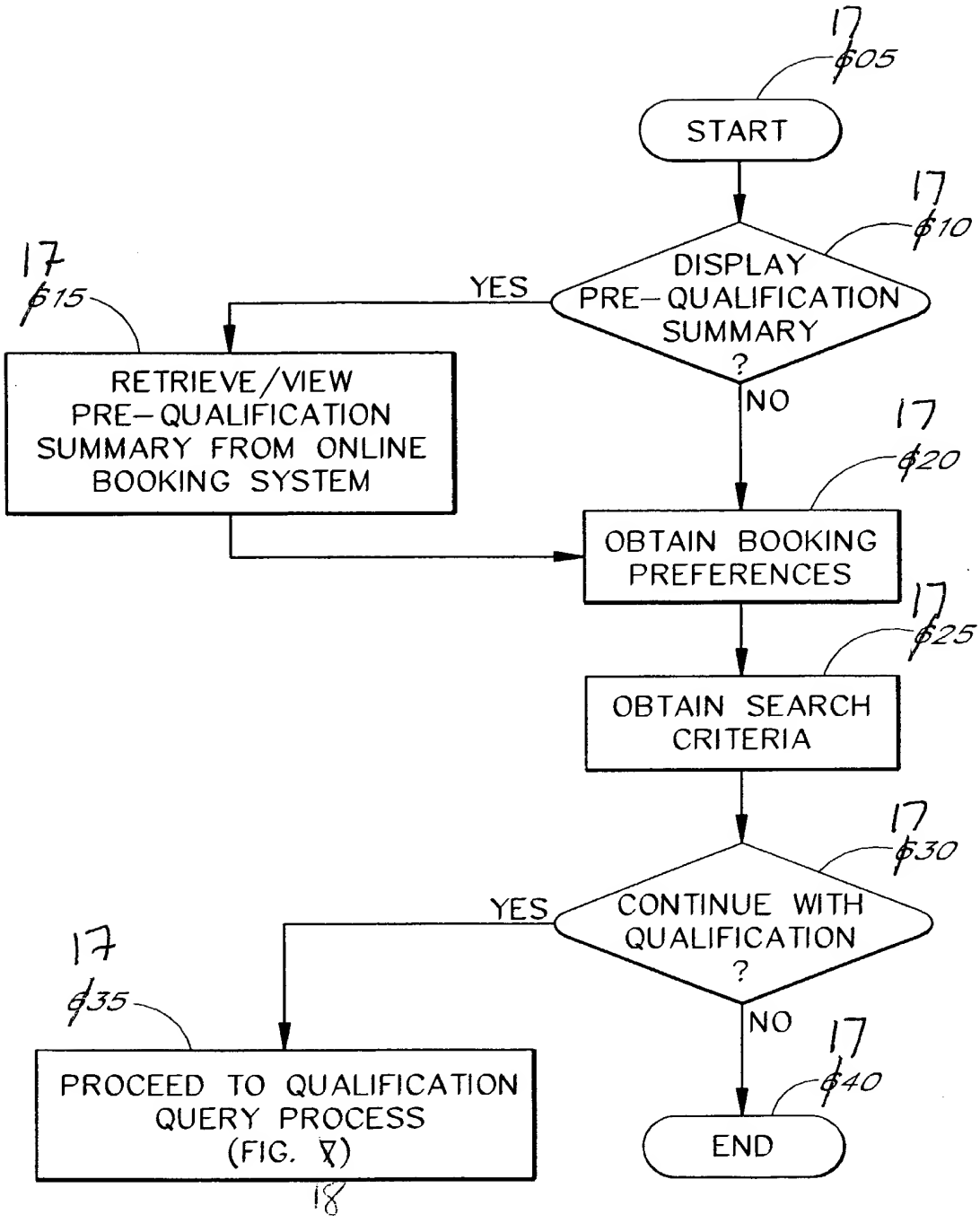

17
405
START
17
410
DISPLAY PRE-QUALIFICATION SUMMARY ?
YES
NO
17
415
RETRIEVE/VIEW PRE-QUALIFICATION SUMMARY FROM ONLINE BOOKING SYSTEM
17
420
OBTAIN BOOKING PREFERENCES
17
425
OBTAIN SEARCH CRITERIA
17
430
CONTINUE WITH QUALIFICATION ?
YES
NO
17
435
PROCEED TO QUALIFICATION QUERY PROCESS (FIG. 8)
18
17
440
END

FIG. 417

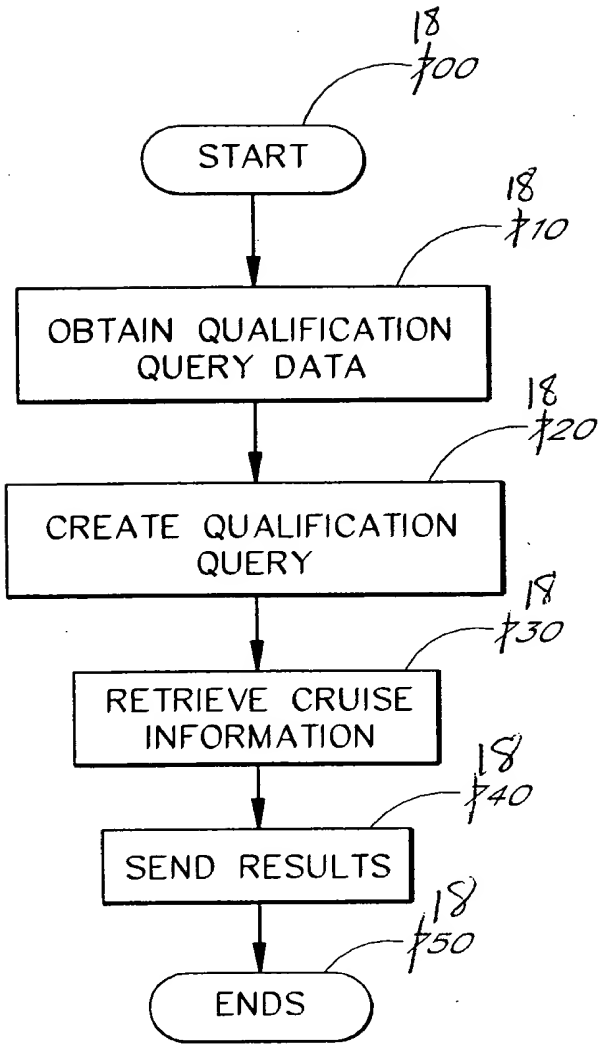

18
700
START
18
710
OBTAIN QUALIFICATION QUERY DATA
18
720
CREATE QUALIFICATION QUERY
18
730
RETRIEVE CRUISE INFORMATION
18
740
SEND RESULTS
18
750
ENDS

FIG. 18

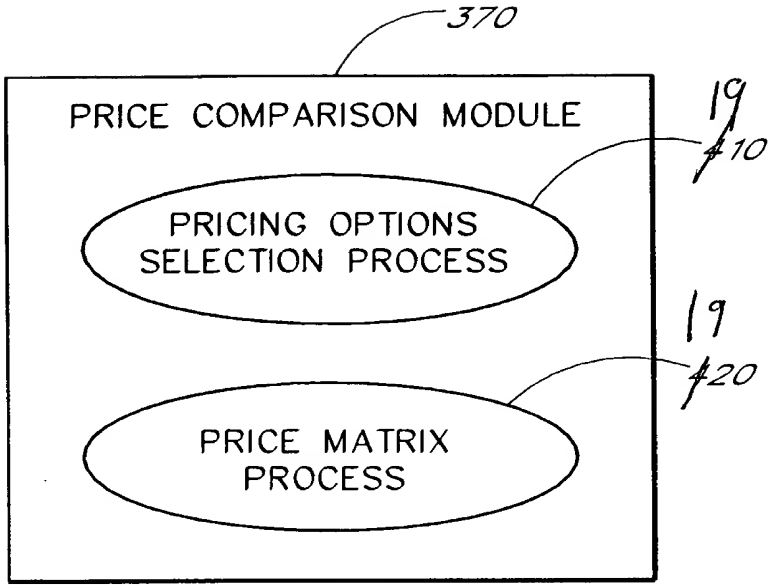

370
PRICE COMPARISON MODULE
19
410
PRICING OPTIONS SELECTION PROCESS
19
420
PRICE MATRIX PROCESS

FIG. 4 19

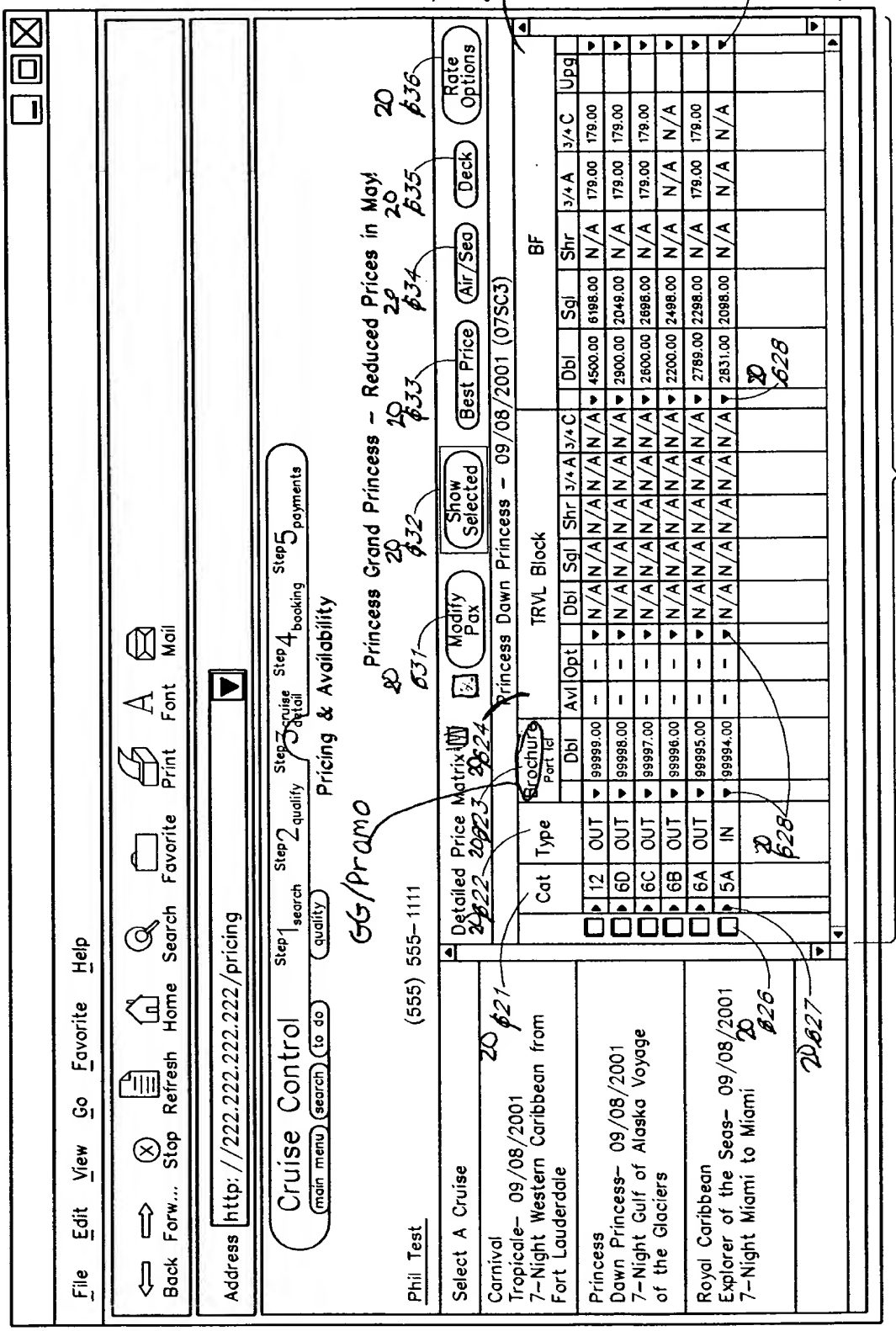

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do quality
Step1 search Step2 qualify Step3 cruise detail Step4 booking Step5 payments
Pricing & Availability
Phil Test
(555) 555-1111
GG/Promo
Princess Grand Princess - Reduced Prices in May!
Princess Dawn Princess - 09/08/2001 (07SC3)
Detailed Price Matrix
Modify Pax
Show Selected
Best Price
Air/Sea
Deck
Rate Options
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
TRVL Block
BF
Cat Type Brochure Port Id
Dbl Avl Opt Dbl Sgl Shr 3/4 A 3/4 C Dbl Sgl Shr 3/4 A 3/4 C Upg
12 OUT 99999.00 - - N/A N/A N/A N/A N/A 4500.00 6198.00 N/A 179.00 179.00
6D OUT 99998.00 - - N/A N/A N/A N/A N/A 2900.00 2048.00 N/A 179.00 179.00
6C OUT 99997.00 - - N/A N/A N/A N/A N/A 2600.00 2698.00 N/A 179.00 179.00
6B OUT 99996.00 - - N/A N/A N/A N/A N/A 2200.00 2498.00 N/A N/A N/A
6A OUT 99995.00 - - N/A N/A N/A N/A N/A 2789.00 2298.00 N/A 179.00 179.00
5A IN 99994.00 - - N/A N/A N/A N/A N/A 2831.00 2098.00 N/A N/A N/A
20 620
20 621
20 622
20 623
20 624
20 625
20 626
20 627
20 628
20 630
20 631
20 632
20 633
20 634
20 635
20 636
610
20

FIG. 6

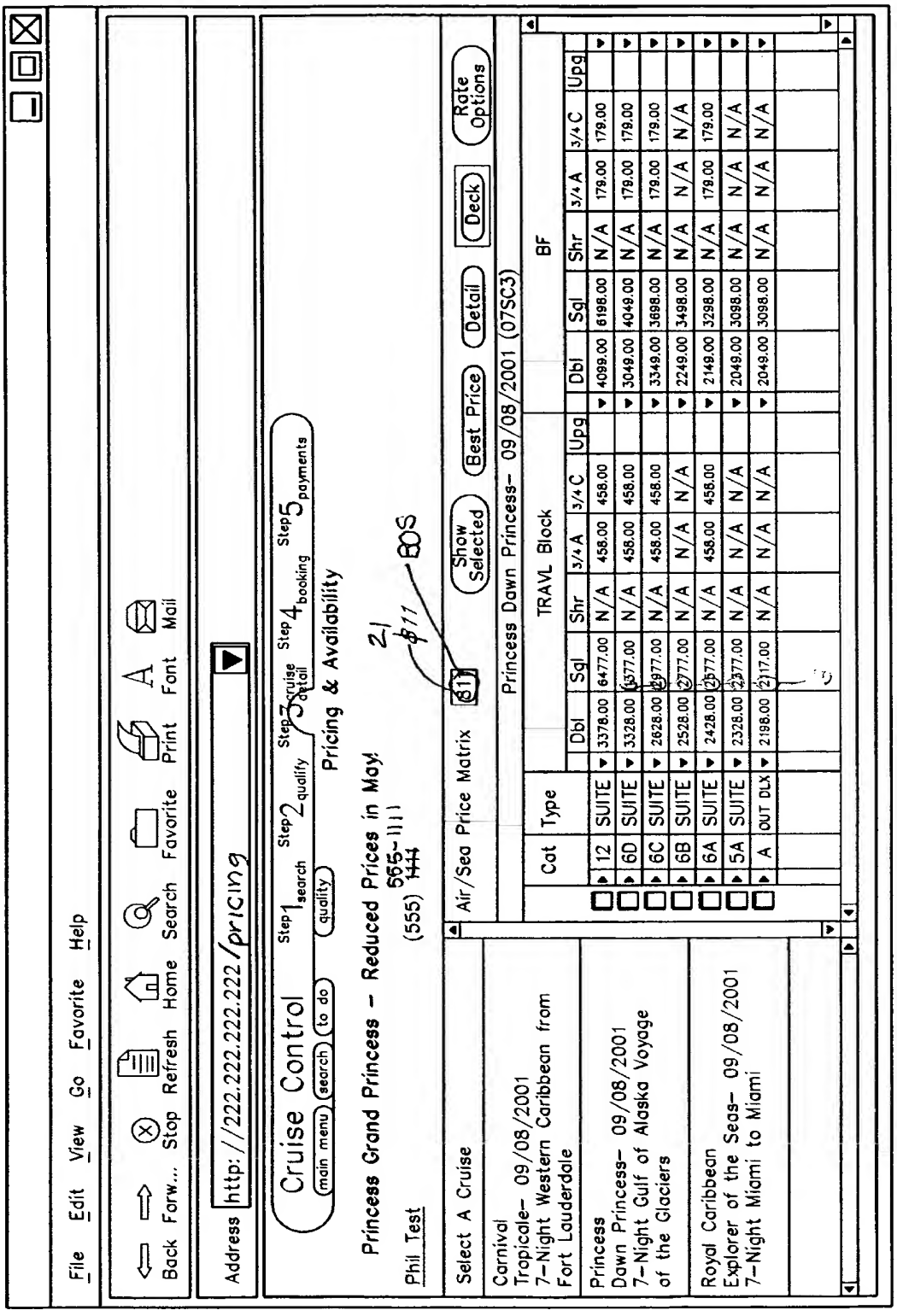

File Edit View Go Favorite Help
Back Forw... Stop Refresh Home Search Favorite Print Font Mail
Address http://222.222.222.222/pricing
Cruise Control
main menu search to do quality
Step1 search Step2 qualify Step3 cruise detail Step4 booking Step5 payments
Pricing & Availability
Princess Grand Princess - Reduced Prices in May!
Phil Test
555-1111
(555) 444
Select A Cruise
Carnival Tropicale- 09/08/2001 7-Night Western Caribbean from Fort Lauderdale
Princess Dawn Princess- 09/08/2001 7-Night Gulf of Alaska Voyage of the Glaciers
Royal Caribbean Explorer of the Seas- 09/08/2001 7-Night Miami to Miami
Air/Sea Price Matrix
Show Selected
Best Price
Detail
Deck
Rate Options
Princess Dawn Princess- 09/08/2001 (07SC3)
TRAVL Block
BF
Cat Type Dbl Sgl Shr 3/4 A 3/4 C Upg Dbl Sgl Shr 3/4 A 3/4 C Upg
12 SUITE 3378.00 6477.00 N/A 458.00 458.00 4099.00 6198.00 N/A 179.00 179.00
6D SUITE 3328.00 6377.00 N/A 458.00 458.00 3049.00 4049.00 N/A 179.00 179.00
6C SUITE 2628.00 6377.00 N/A 458.00 458.00 3349.00 3698.00 N/A 179.00 179.00
6B SUITE 2528.00 2777.00 N/A N/A N/A 2249.00 3498.00 N/A N/A N/A
6A SUITE 2428.00 2377.00 N/A 458.00 458.00 2149.00 3298.00 N/A 179.00 179.00
5A SUITE 2328.00 2377.00 N/A N/A N/A 2049.00 3098.00 N/A N/A N/A
A OUT DLX 2198.00 2117.00 N/A N/A N/A 2049.00 3098.00 N/A N/A N/A
611
805
21
810
21

FIG. 8 21

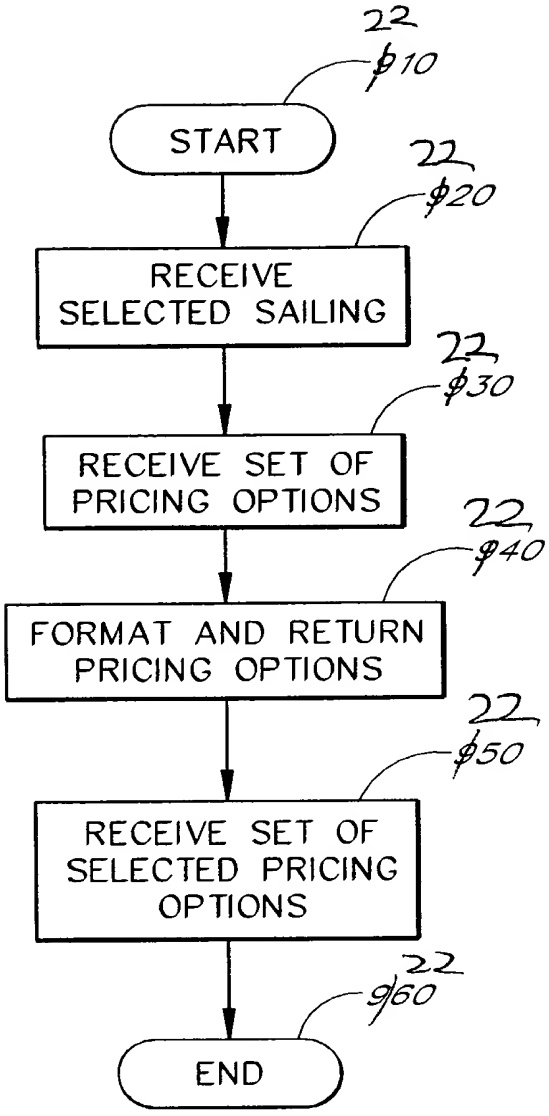

22
$10
START
22
$20
RECEIVE SELECTED SAILING
22
$30
RECEIVE SET OF PRICING OPTIONS
22
$40
FORMAT AND RETURN PRICING OPTIONS
22
$50
RECEIVE SET OF SELECTED PRICING OPTIONS
22
$60
END

FIG. 22

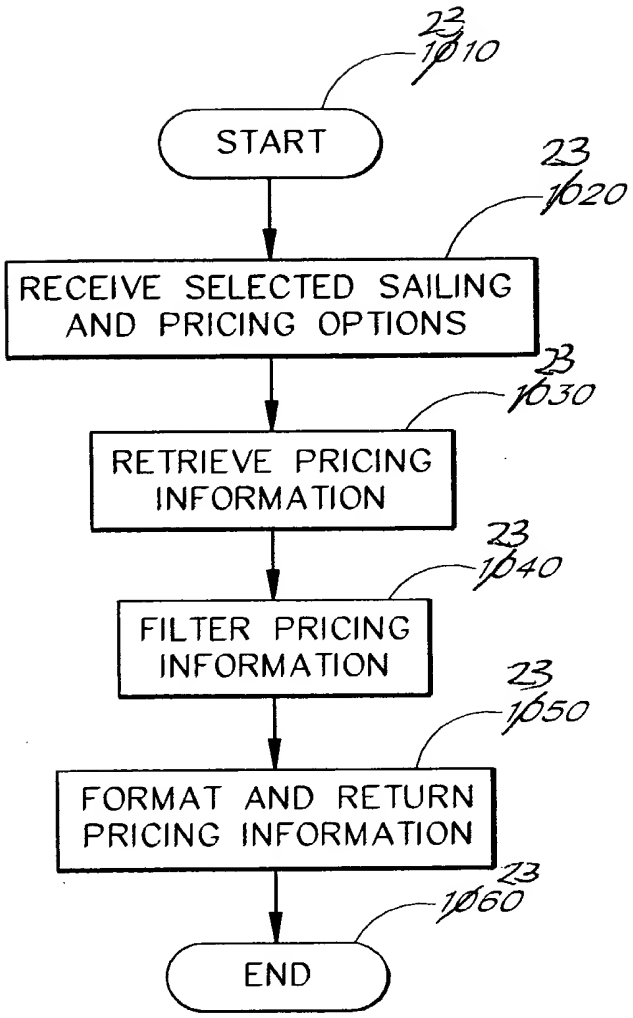

22
1010
START
23
1020
RECEIVE SELECTED SAILING AND PRICING OPTIONS
23
1030
RETRIEVE PRICING INFORMATION
23
1040
FILTER PRICING INFORMATION
23
1050
FORMAT AND RETURN PRICING INFORMATION
23
1060
END

FIG. 10

23

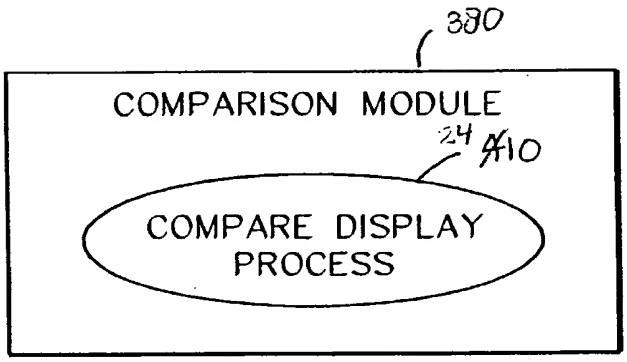


FIG. 4
24

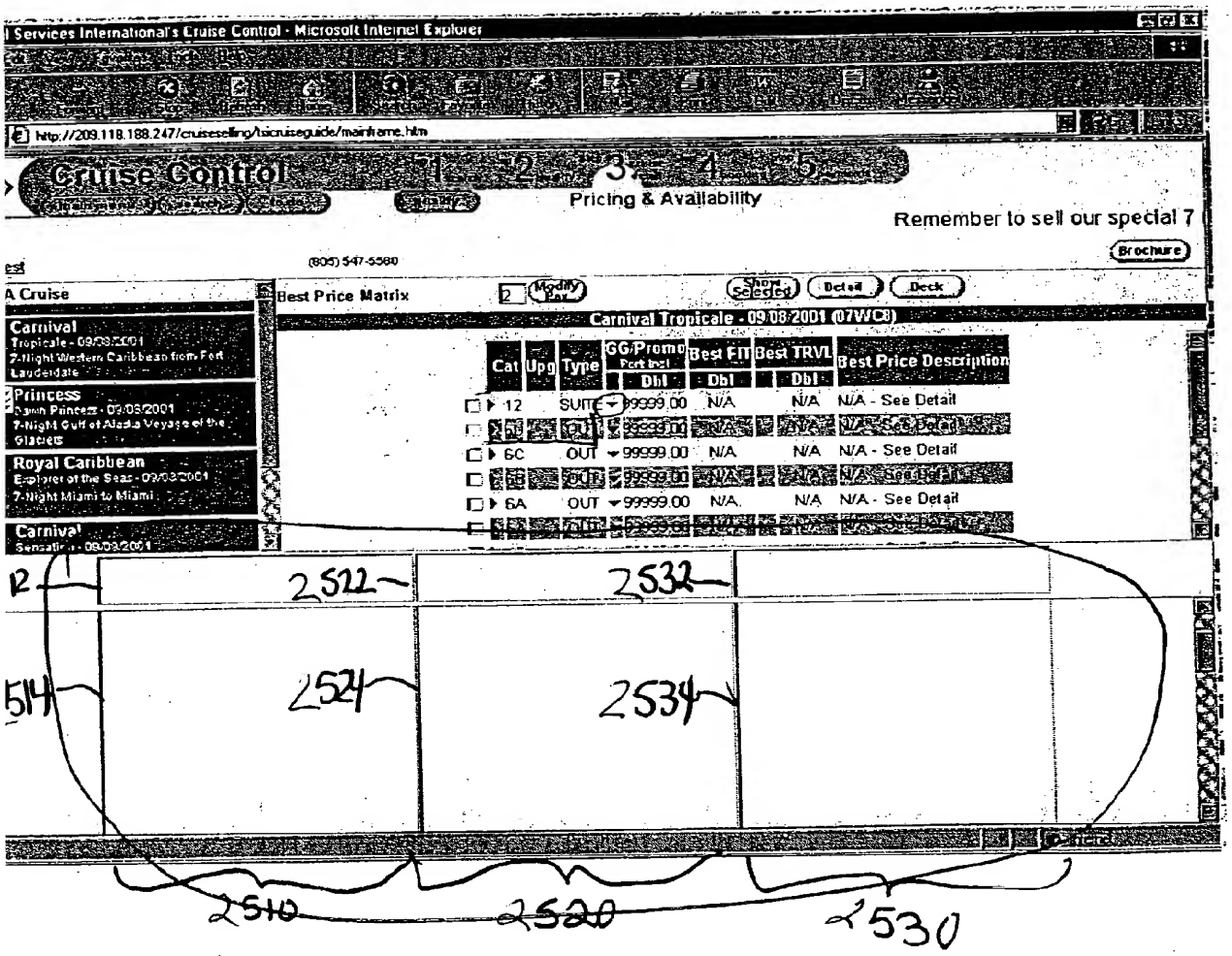

Services International's Cruise Control - Microsoft Internet Explorer
Cruise Control
Pricing & Availability
Remember to sell our special 7
Brochure
Best Price Matrix
Carnival Tropicale - 09/08/2001 (07WC8)
Cat
Upg
Type
GG/Promo
Best FIT
Best TRVL
Best Price Description
12 SUITE 99999.00 N/A N/A N/A - See Detail
6C OUT 99999.00 N/A N/A N/A - See Detail
6A OUT 99999.00 N/A N/A N/A - See Detail
2522
2532
2524
2534
2510
2520
2530

FIGURE 8

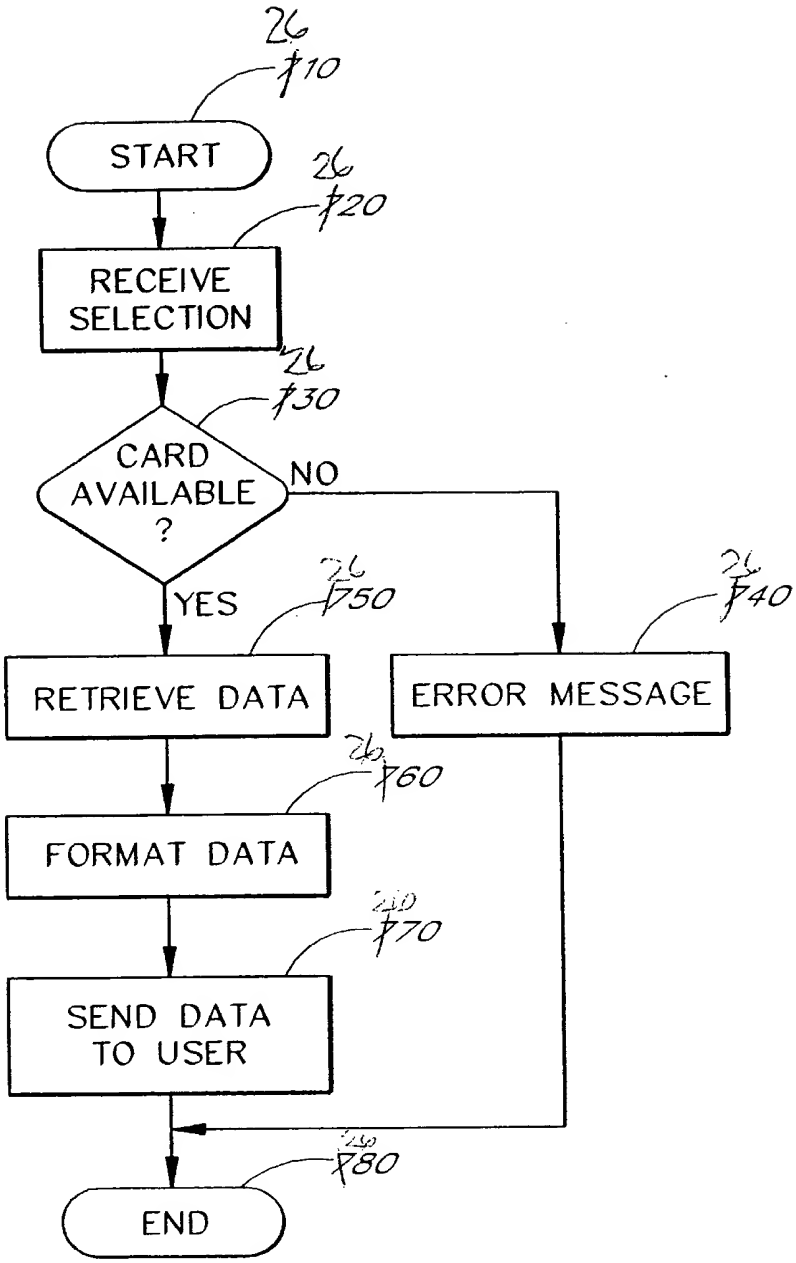

26
710
START
26
720
RECEIVE SELECTION
26
730
CARD AVAILABLE ?
NO
YES
26
750
RETRIEVE DATA
26
740
ERROR MESSAGE
26
760
FORMAT DATA
26
770
SEND DATA TO USER
26
780
END

FIG. 26

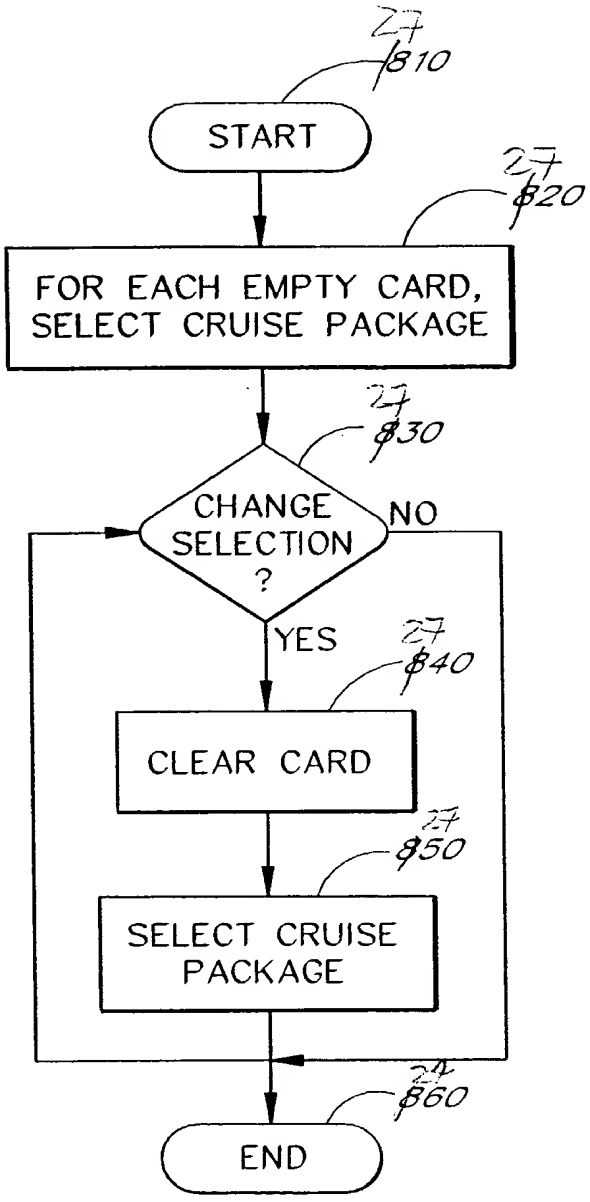

27
810
START
27
820
FOR EACH EMPTY CARD, SELECT CRUISE PACKAGE
27
830
CHANGE SELECTION ?
NO
YES
27
840
CLEAR CARD
27
850
SELECT CRUISE PACKAGE
27
860
END

FIG. 827

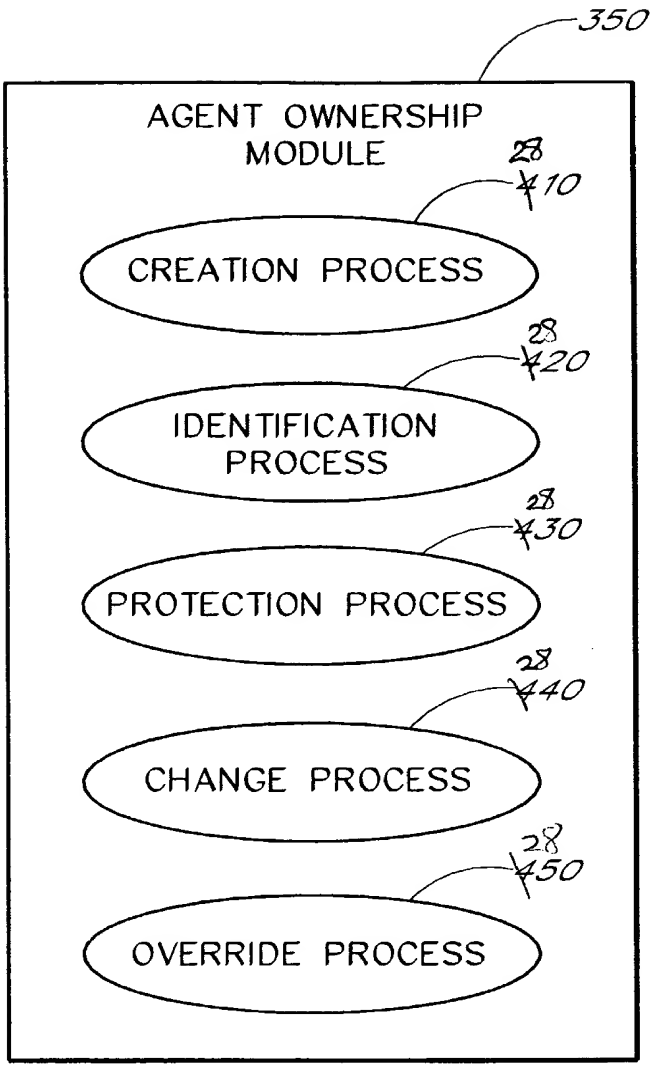

350
AGENT OWNERSHIP MODULE
410
CREATION PROCESS
420
IDENTIFICATION PROCESS
430
PROTECTION PROCESS
440
CHANGE PROCESS
450
OVERRIDE PROCESS

FIG. 28

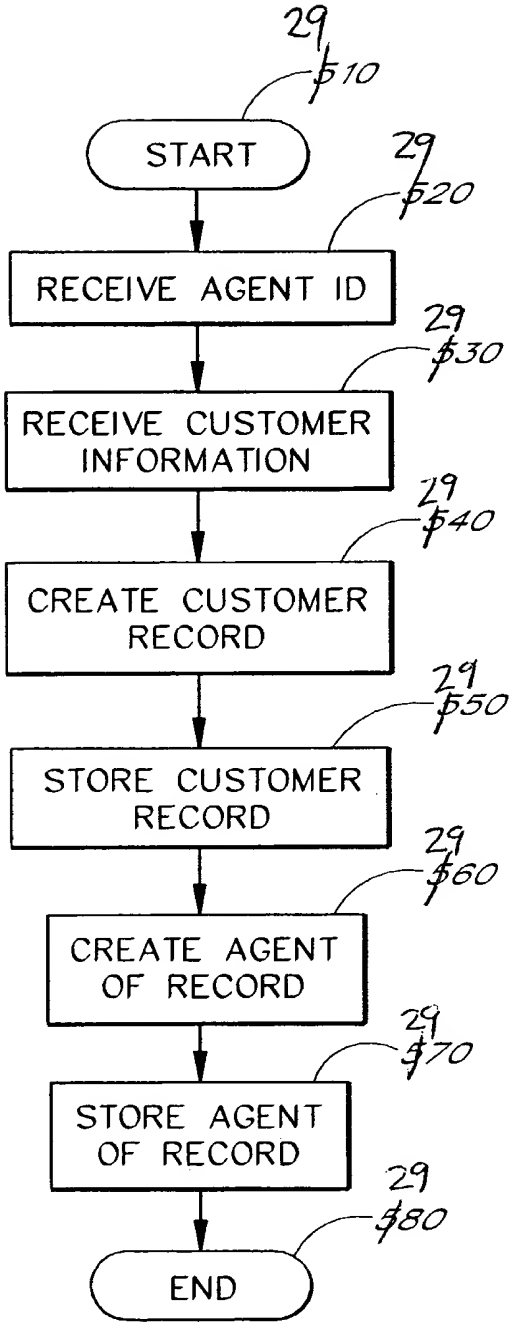

29
510
START
29
520
RECEIVE AGENT ID
29
530
RECEIVE CUSTOMER INFORMATION
29
540
CREATE CUSTOMER RECORD
29
550
STORE CUSTOMER RECORD
29
560
CREATE AGENT OF RECORD
29
570
STORE AGENT OF RECORD
29
580
END

FIG. 5 29

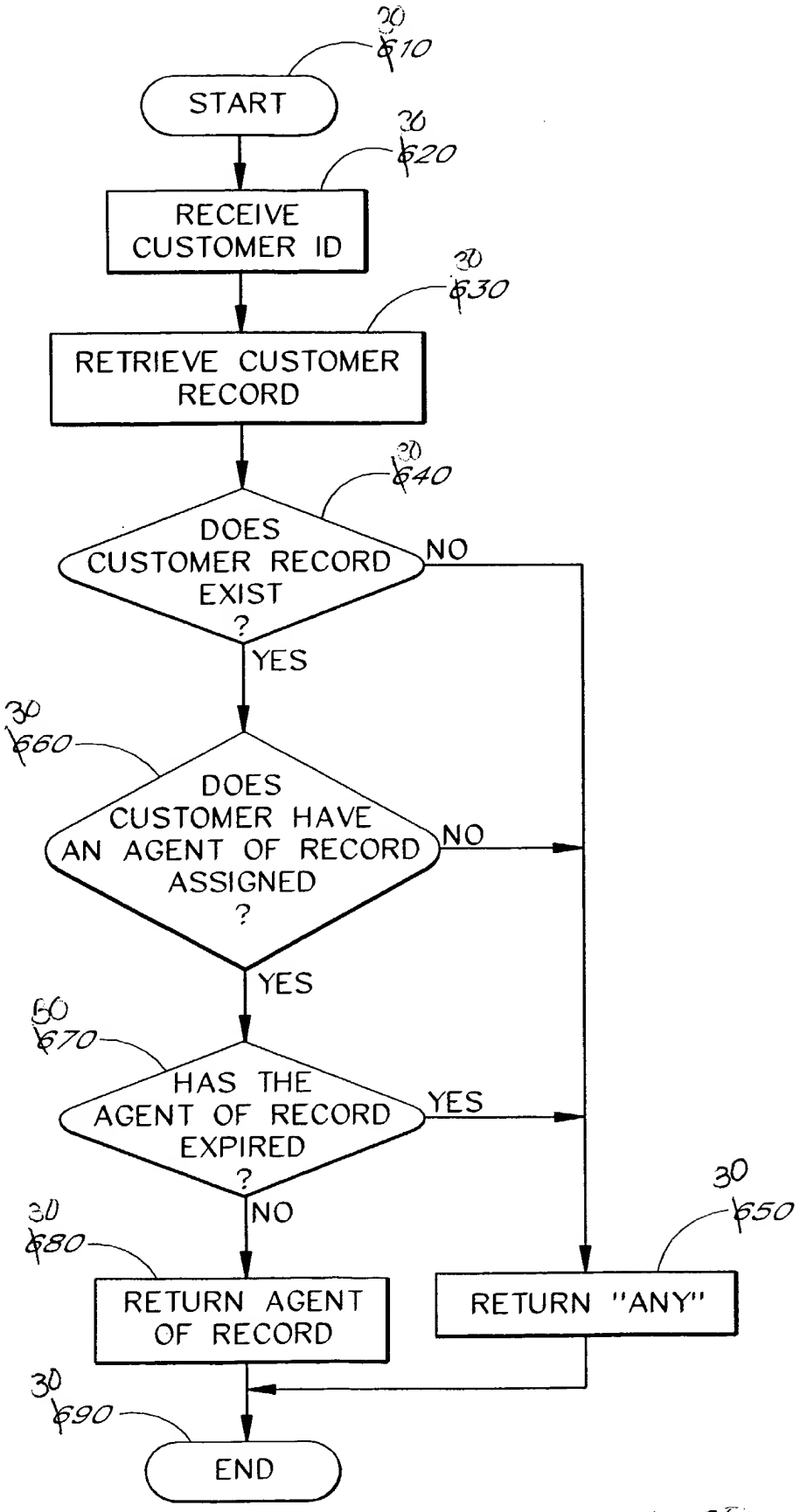

START
RECEIVE CUSTOMER ID
RETRIEVE CUSTOMER RECORD
DOES CUSTOMER RECORD EXIST ?
NO
YES
DOES CUSTOMER HAVE AN AGENT OF RECORD ASSIGNED ?
NO
YES
HAS THE AGENT OF RECORD EXPIRED ?
YES
NO
RETURN AGENT OF RECORD
RETURN "ANY"
END

FIG. 6

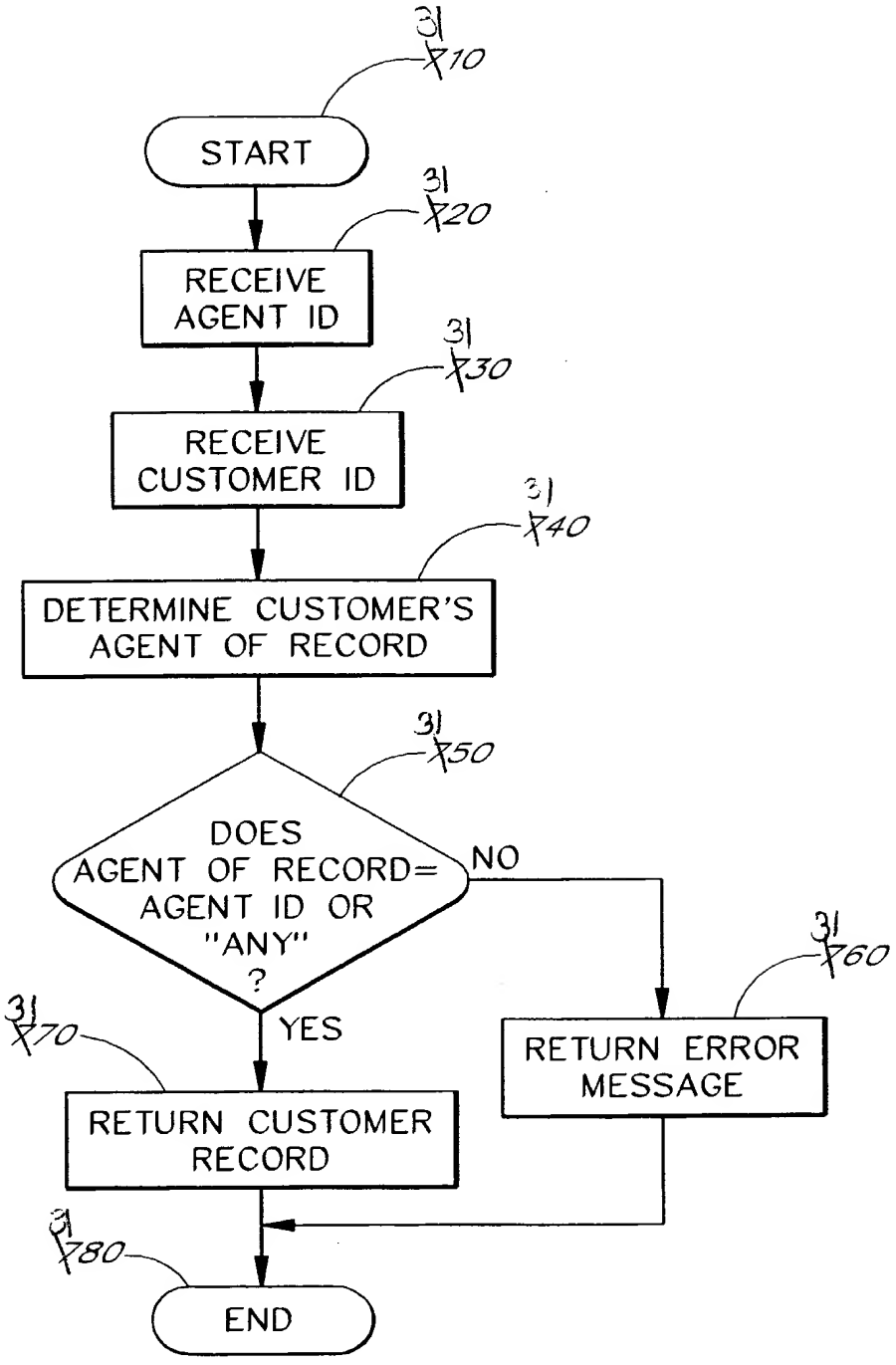

310
START
320
RECEIVE AGENT ID
330
RECEIVE CUSTOMER ID
340
DETERMINE CUSTOMER'S AGENT OF RECORD
350
DOES AGENT OF RECORD= AGENT ID OR "ANY" ?
NO
YES
360
RETURN ERROR MESSAGE
370
RETURN CUSTOMER RECORD
380
END

FIG. 31

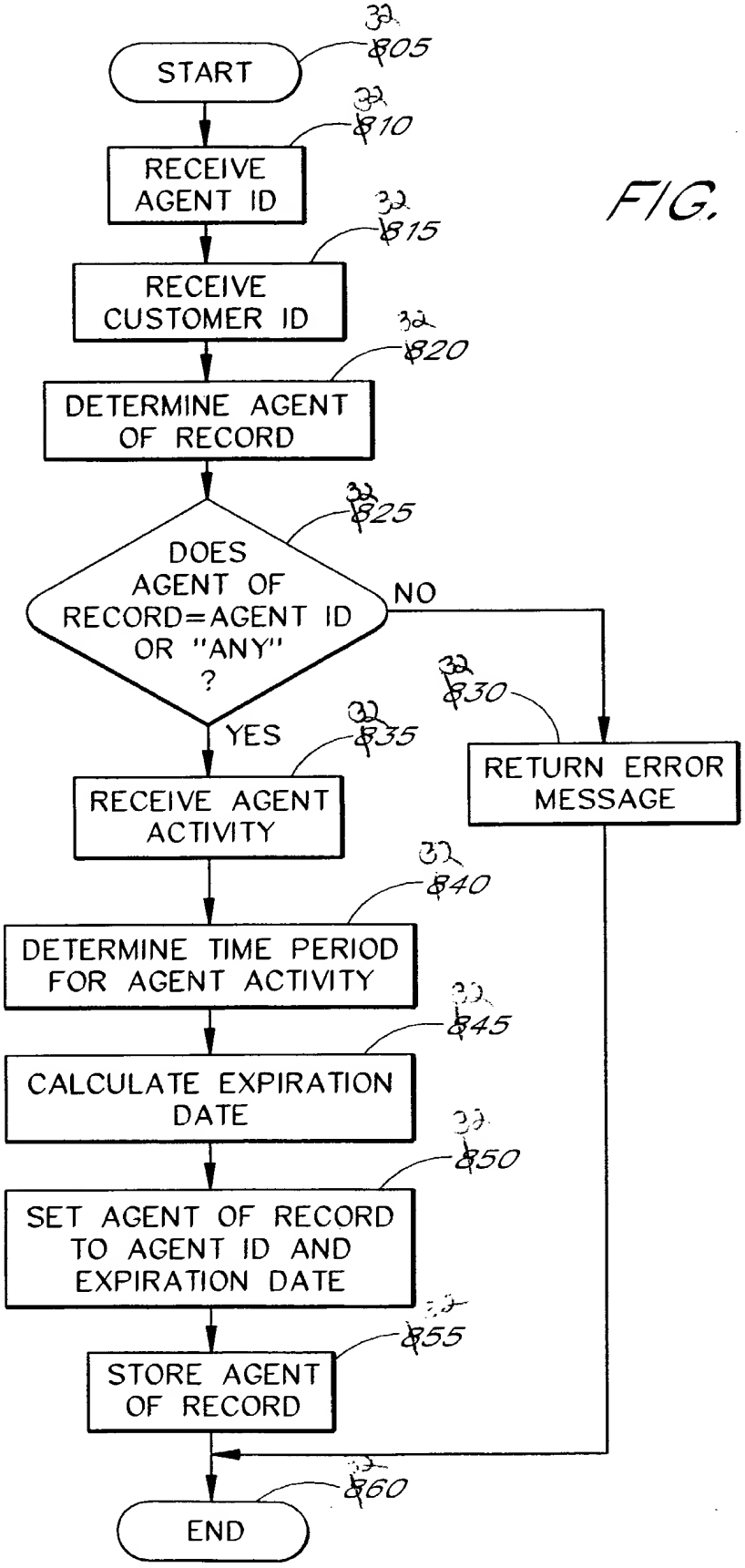

START
805
RECEIVE AGENT ID
810
RECEIVE CUSTOMER ID
815
DETERMINE AGENT OF RECORD
820
DOES AGENT OF RECORD=AGENT ID OR "ANY" ?
825
NO
YES
RETURN ERROR MESSAGE
830
RECEIVE AGENT ACTIVITY
835
DETERMINE TIME PERIOD FOR AGENT ACTIVITY
840
CALCULATE EXPIRATION DATE
845
SET AGENT OF RECORD TO AGENT ID AND EXPIRATION DATE
850
STORE AGENT OF RECORD
855
END
860

FIG. 832

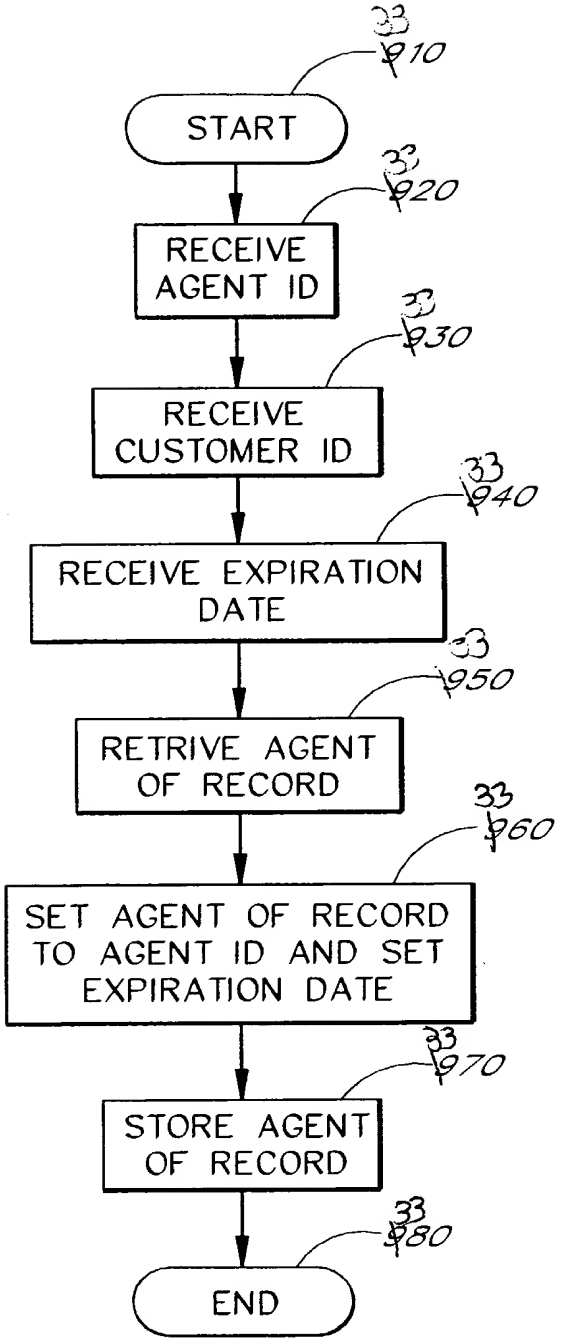

33
910
START
33
920
RECEIVE AGENT ID
33
930
RECEIVE CUSTOMER ID
33
940
RECEIVE EXPIRATION DATE
33
950
RETRIVE AGENT OF RECORD
33
960
SET AGENT OF RECORD TO AGENT ID AND SET EXPIRATION DATE
33
970
STORE AGENT OF RECORD
33
980
END

FIG. 933

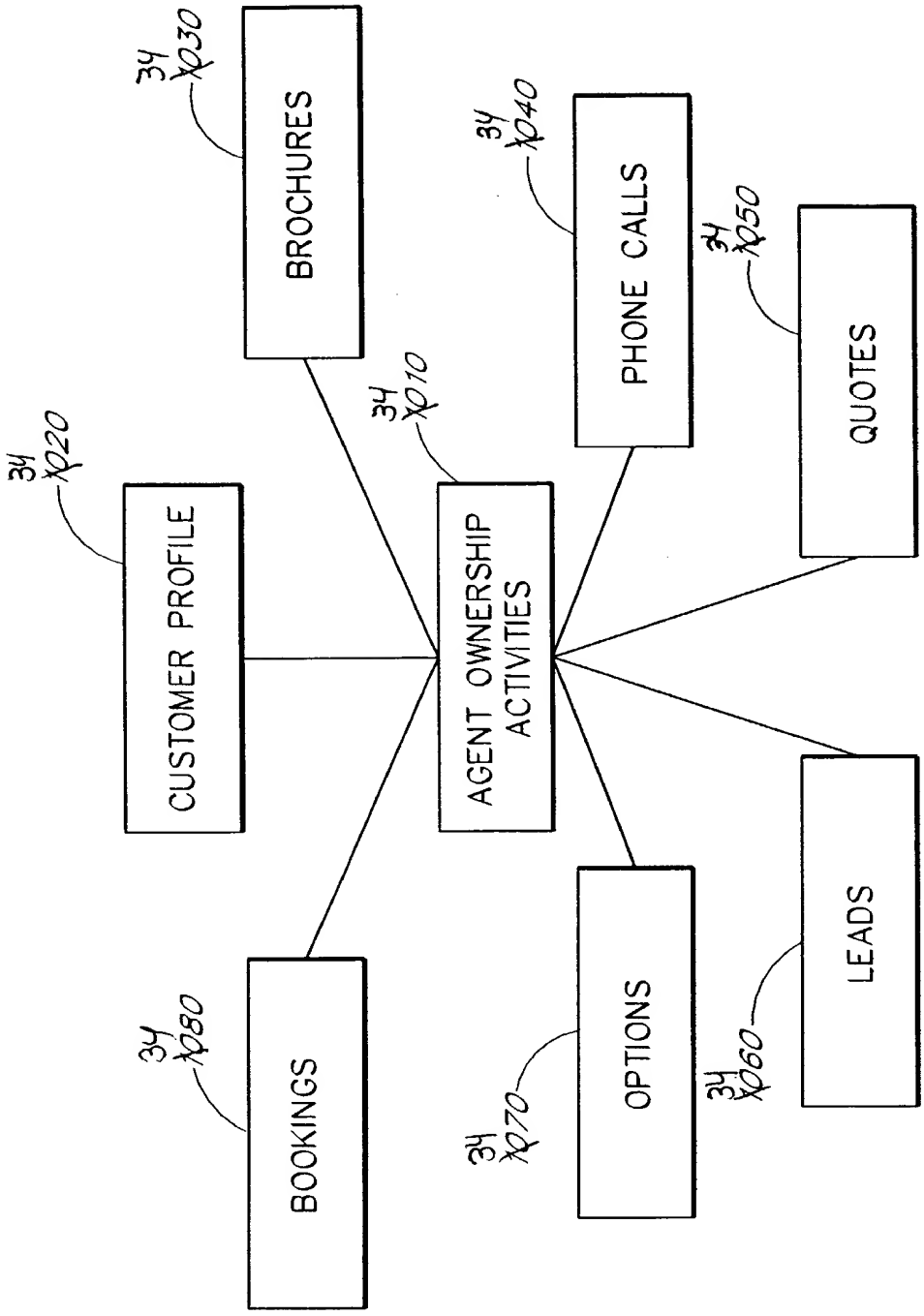

AGENT OWNERSHIP ACTIVITIES
34 X010
BROCHURES
34 X030
PHONE CALLS
34 X040
QUOTES
34 X050
LEADS
34 X060
OPTIONS
34 X070
BOOKINGS
34 X080
CUSTOMER PROFILE
34 X020

FIG. 10 34

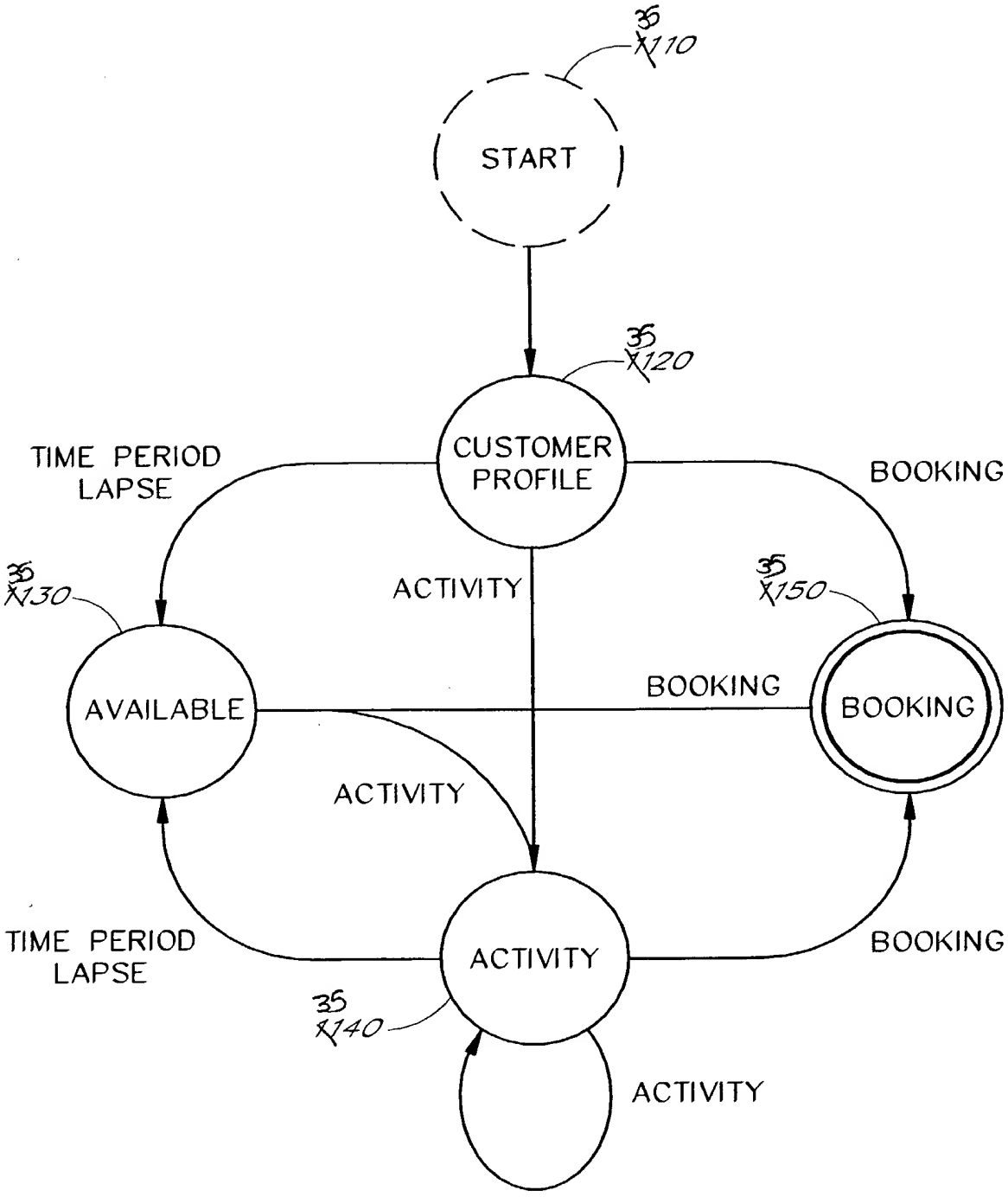

35
110
START
35
120
CUSTOMER PROFILE
TIME PERIOD LAPSE
BOOKING
ACTIVITY
35
130
AVAILABLE
35
150
BOOKING
BOOKING
ACTIVITY
TIME PERIOD LAPSE
ACTIVITY
BOOKING
35
140
ACTIVITY

FIG. 1B

PCT/US 00/32875

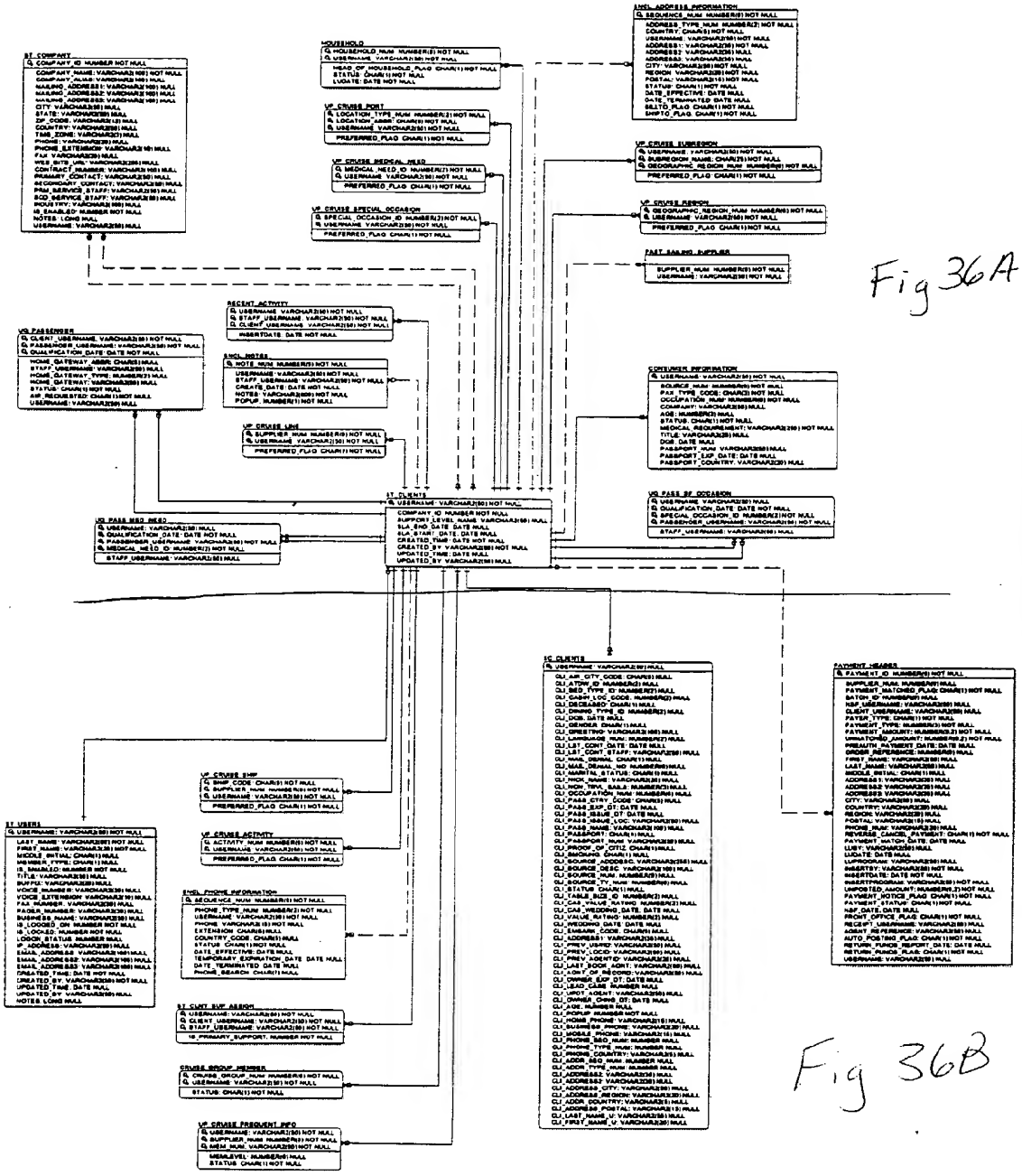


Fig 36A

Fig 36B

PCT/US 00/32875

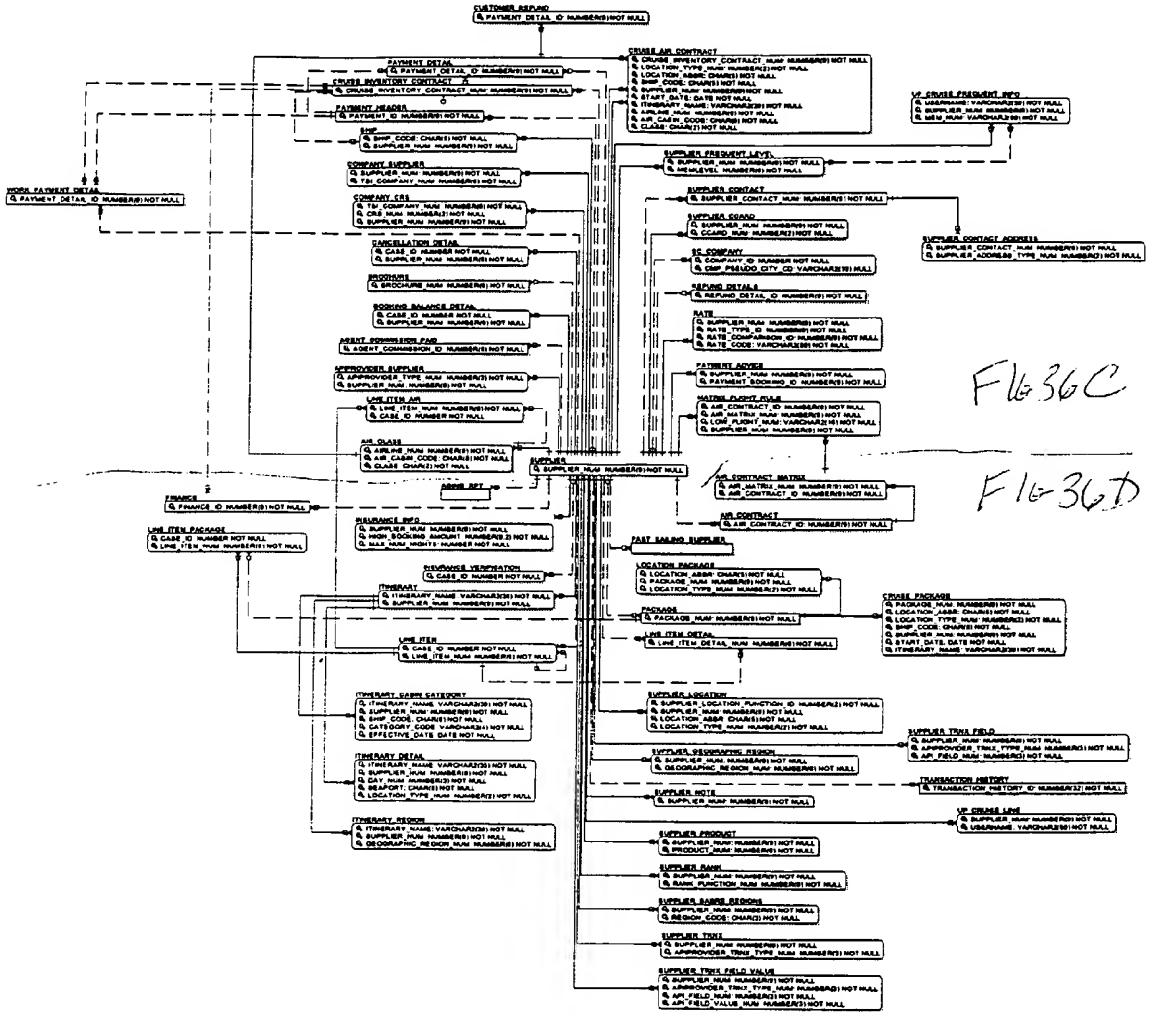


FIG 36C

FIG 36D

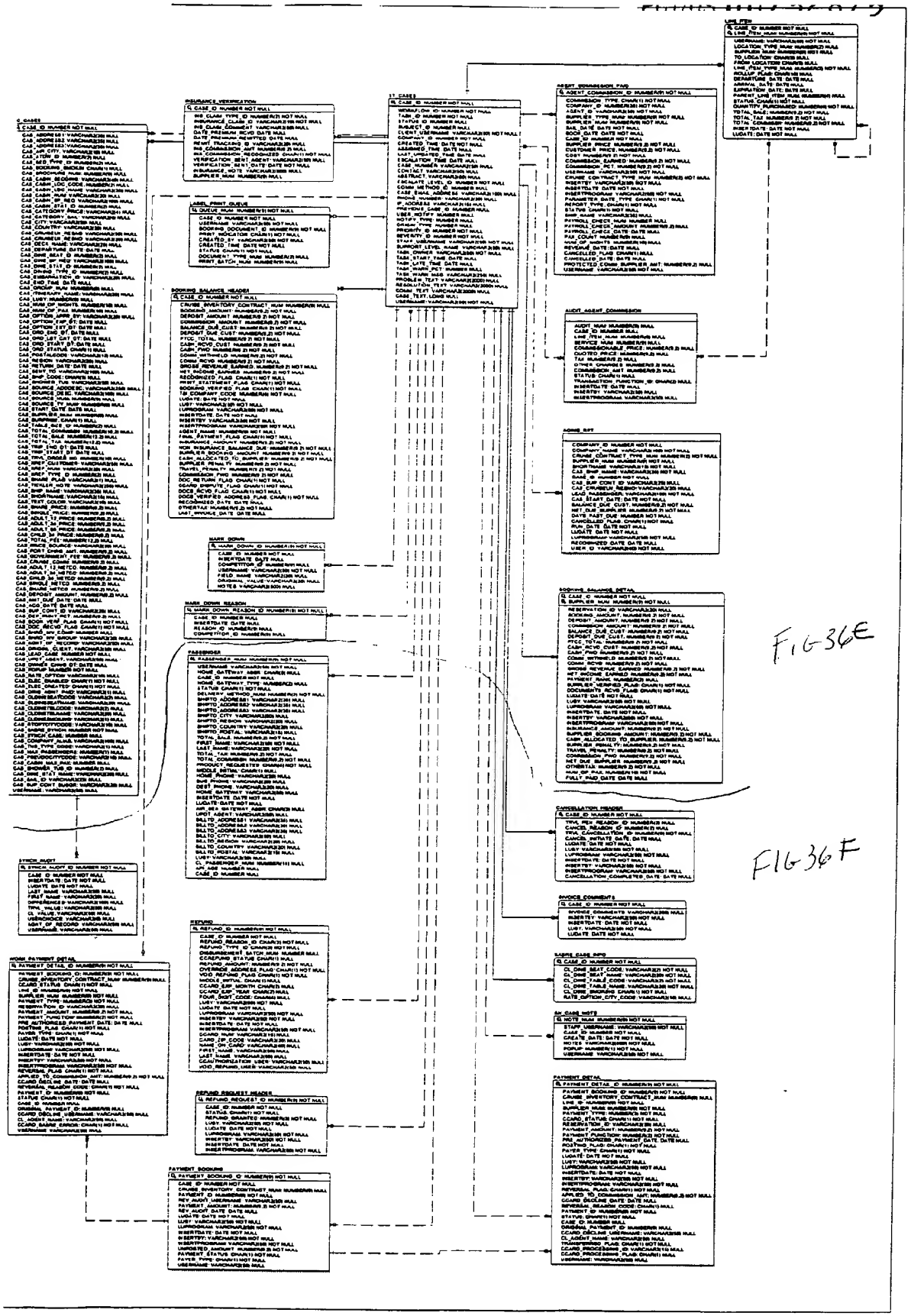


FIG 36E

FIG 36F

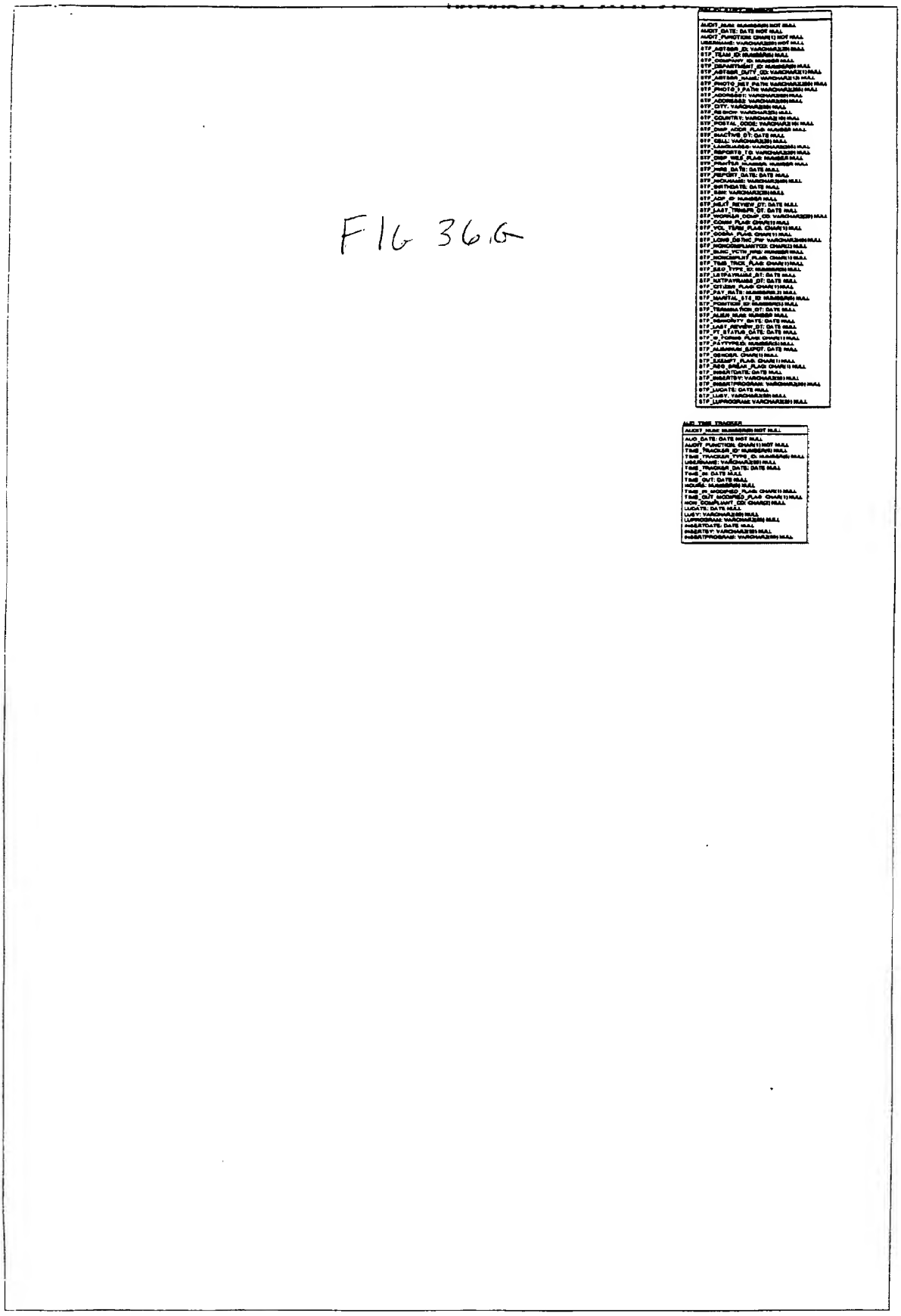


Fig 36G

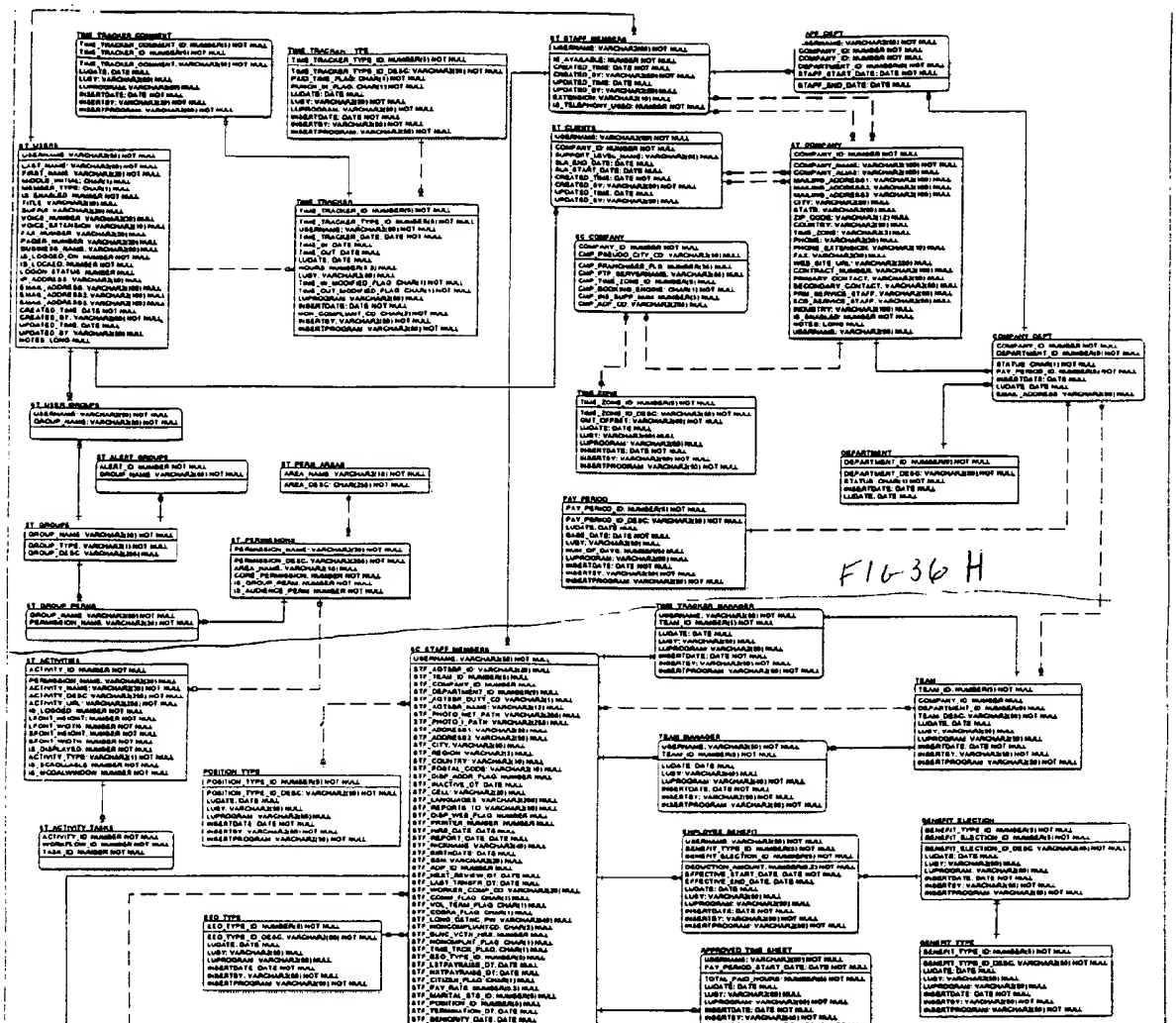


FIG 36 H

FIG 36 I

FIG 36 J

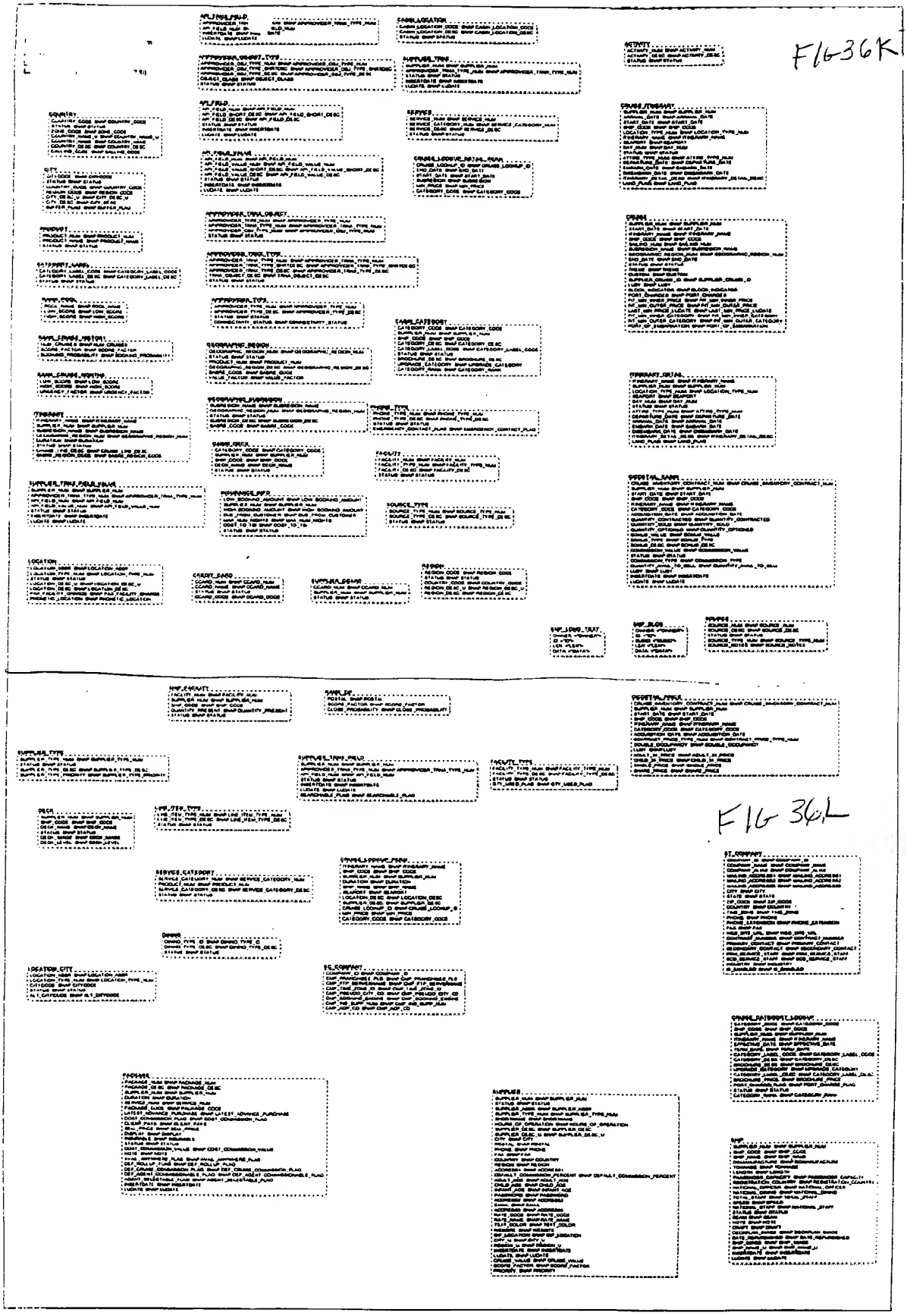


FIG 36K

FIG 36L